Motion Computing LE1600 Tablet PC

Microsoft Windows XP Tablet PC Edition 2005

User Guide

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P/N 024-02-0061 Rev. A00

About This User Guide

Cautions, Warnings and Notices

The following notices are found in this User Guide:

WARNING: Text set off in this way indicates that failure to follow directions in the warning could result in bodily harm or loss of life.

CAUTION: Text set off in this way indicates that failure to follow directions in the CAUTION could result in damage to the equipment or loss of information.

IMPORTANT: Text set off in this way presents information or instructions that should be followed or information of particular interest.

NOTE: Text set off in this way presents information or instructions.

Menu Items, Buttons, Icons

Menu items, icons, and instructions found in the procedures in this User Guide are set apart by capitalizing them exactly as shown on screen. Examples are the Start menu, Dashboard, Tablet and Pen Settings icon, and Apply buttons.

Writing on the Display

Writing on the Motion Tablet PC digitizer display in this User Guide refers to any handwritten input using the specially-designed Motion digitizer pen, that is provided. The display responds only to this pen and not to any other type of pen or to a stylus or other device such as those used with personal digital assistants (PDAs). The display surface may be damaged by ink pens or other pointed objects.

Ink

The term ink refers to digital ink, i.e., hand-drawn or handwritten input and that can be displayed or converted into text.

References to Using the Pen and Pen Function Button

Notations for using the Motion Digitizer Pen, which are found throughout this User Guide, are described below:

- Tap — Firmly tap the pen on the Tablet PC display, without pressing the function button on the pen; a tap equals a mouse left-click
- Double-tap — Tap the pen twice on the display, without pressing the function button on the pen
- Right-click — Press the function button on the pen and tap the pen on the display (equals a mouse right-click)
- Press and hold — Press and hold the tip of the pen to the display without pressing the pen function button (equals a mouse right-click)
- Tap and drag — Tap and drag the pen on the display
- Select/Highlight — Tap on the item on the display to activate the function: to select a line of text, tap, hold down the button, and drag the pen across the text to highlight it

Task Bar/ System Tray

The Microsoft Windows task bar is on the lower-left of the display; the system tray (or notification area) is on the lower right, near the clock.

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Chapter 1

Getting Started with Your Tablet PC

The Tablet PC from Motion Computing® combines the best features of desktop and notebook computing with the unique mobility and versatility found only in a Tablet PC. This chapter provides a quick start overview of the hardware and software features of the Tablet PC. Specific details on how to set up and use the Tablet PC are provided in Chapter 2. The Care and Maintenance of your new Tablet PC is detailed in Chapter 3. Appendix A is a summary of common problems and the steps to take if those problems occur. Appendix B is a reference to where you can find the Tablet PC Specifications.

It is not necessary to read this document from cover to cover. If you are already familiar with personal computers, you may feel comfortable proceeding to the instructions in the next chapter. If there are certain things you want to learn about your new Tablet PC, look in the Table of Contents or search for that topic.

Features Overview

The Motion Tablet PC includes these key features:

- Microsoft® Windows® XP Tablet PC Edition 2005 operating system that contains a Tablet PC Input Panel (TIP) with ink-to-text and word recognition functionality, and an improved security infrastructure that helps defend against viruses, worms, and hackers
- Optional View Anywhere™ display which optimizes the display for both outdoor and indoor viewing, providing the same wide viewing angles as the standard display while significantly improving the sunlight contrast ratio and significantly reducing unwanted reflection and glare
- Ambient Light Sensor (ALS) to automatically optimize display performance and battery life
- Integrated 802.11 Wi-Fi wireless technology
- Integrated Bluetooth® wireless technology for pairing with Bluetooth devices
- Fingerprint reader for convenient, secure biometric password management; combined with Motion OmniPass software to manage settings
- Speak Anywhere™ technology that combines user-configurable acoustics software with integrated array microphones to optimize the audio capabilities of your Tablet PC
- Motion Dashboard for convenient access to Tablet PC controls
- High speed USB ports
- Front panel status LEDs and function buttons

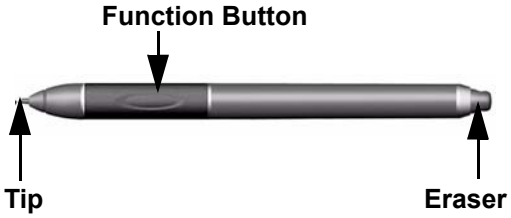
- Screen rotation
- Handwriting and voice recognition
- PC Card slot for memory expansion, or accessory connections
- Secure Digital (SD) Card slot to support SD storage devices
- User-configurable power-saving schemes
- Additional I/O ports
  - Two audio jacks (designated as microphone/audio in and headphone/audio out)
  - Two USB 2.0 ports
  - External VGA monitor port
  - RJ-45 (Gigabit Ethernet network)
  - DVI-D (Digital Video Interface) port
  - Infrared (IrDA) transceiver
- DC power-in port
- Motion Digitizer Pen/Eraser for ink input, with a pen storage bay and a pen tether anchor built into the Tablet PC
- Universal security lock slot

Quick Start Instructions

Start the Tablet PC by sliding the power switch. The power LED turns blue and the Hard Disk Drive (HDD) LED intermittently flashes blue (these are the top two LEDs on the upper right corner). Then Windows XP launches. When you start the Tablet PC, the **Windows XP Tablet PC Edition 2005 Tutorials** screen appears.

> **NOTE:** If you do not want this screen to continue to appear, check "**Do not show me this again**." We recommend that you complete the Microsoft tutorials, which take a few minutes. It you do not want to run the tutorials now, you can return to them by tapping **Start > Using Your Motion Tablet PC**.

Using the Motion Digitizer Pen



The Motion Digitizer Pen contains internal electronics that let you enter digital ink on the Tablet PC display. The pen is a sensitive, electronic, data-entry device designed in conjunction with the display. The pen includes a user-replaceable tip; the other end of the pen serves as an eraser in applications that support an eraser. The pen contains no batteries and requires no external power. The pen contains a pen function button, used for right-clicking (like a mouse) and a small opening at one end for attaching a pen tether cord. Using the pen tether (provided) helps prevent pen loss; attach it to the built-in pen tether post on the upper right edge of the Tablet PC. The pen also comes with replacement pen tips and a replacement tool. For information about replacing the pen tips, refer to the Care and Maintenance information in Chapter 3.

Pen Usage. Think of the pen as your mouse; review the following information about how it works in conjunction with tapping, pressing, and the function button.

- Tap — Firmly tap the pen on the Tablet PC display, without pressing the function button on the pen; a tap equals a mouse left-click
- Double-tap — Tap the pen twice on the display, without pressing the function button on the pen
- Right-click — Press the function button on the pen and tap the pen on the display (equals a mouse right-click)
- Press and hold — Press and hold the tip of the pen to the display without pressing the pen function button (equals a mouse right-click)
- Tap and drag — Tap and drag the pen on the display
- Select/Highlight — Tap on the item on the display to activate the function: to select a line of text, tap, hold down the button, and drag the pen across the text to highlight it

> **NOTE:** For best results, we recommend that you calibrate your pen before using it for the first time. For information about this and other pen procedures, refer to “Calibrating and Using Your Digital Pen” on page 20.

Helpful Hints: Pen and Ink

Here are some additional hints about working with the digital pen. For more information about the pen and Tablet PC settings refer to “Configuring Tablet and Pen Settings” on page 19.

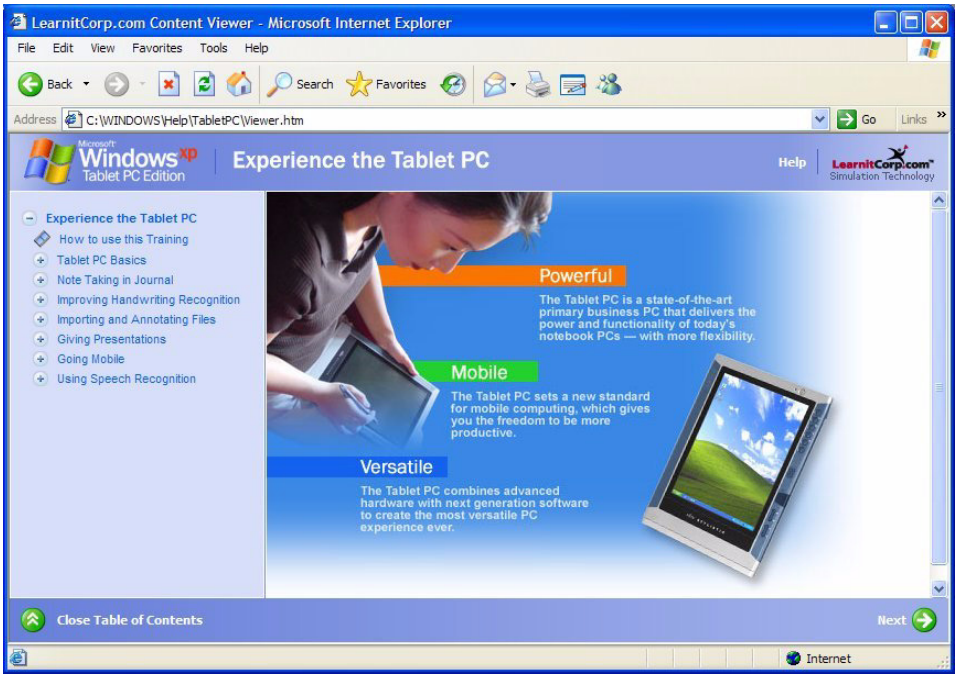
- When you write with the pen, you can rest your hand or arm anywhere without disturbing any open programs or damaging the display.
- Watch the cursor instead of the pen tip when you write. The cursor is a guide for your pen movements. If it does not align with the pen tip, you should recalibrate the pen.
- Practice writing and learn how firmly and where to tap on the Tablet PC display. You need these skills for activating programs, menus, or other Tablet PC functions.
- The pen can be held like any other writing tool. Learn how to hold it and when and how to press the function button on the pen, which activates right-click options (such as pop-up menus). You can also activate the right-click options by pressing and holding the pen tip on the surface of the display.
- Change pen tips every 90 days in a clean environment. Change pen tips every 30 days if you use the pen in an environment with airborne or surface debris (sand, dust, etc.) or if you drop it on a rough surface. Any of these or similar situations could damage the pen tip or embed debris in it. You may not notice the damage or debris until it is too late. Damaged pen tips could scratch the display.

Perform the following steps to familiarize yourself with the Tablet PC.

- Complete the Microsoft Tablet PC Tutorials
- Read the Motion Resources Page and review the User Guide
- Open the **Motion Dashboard**
- Go to the Microsoft Help and Resources Page for more information

Complete the Microsoft Tablet PC Tutorials

When you start your Tablet PC, several tutorials are offered to help you learn to use various features, such as the Tablet PC Input Panel (TIP) and speech recognition.



The tutorials are short, quick, and informative and are an excellent place to begin a successful Tablet PC experience.

NOTE: Microsoft Windows XP Tablet PC Edition 2005 provides several tutorials. One set appears each time you start the Tablet PC (unless you deactivate this option). Others can be found by tapping the **Using Your Motion Tablet** icon on your desktop. If you are new to the Tablet PC world, taking the tutorials is a great way to get started and learn quickly.

Review Using Your Motion Tablet and User Guide

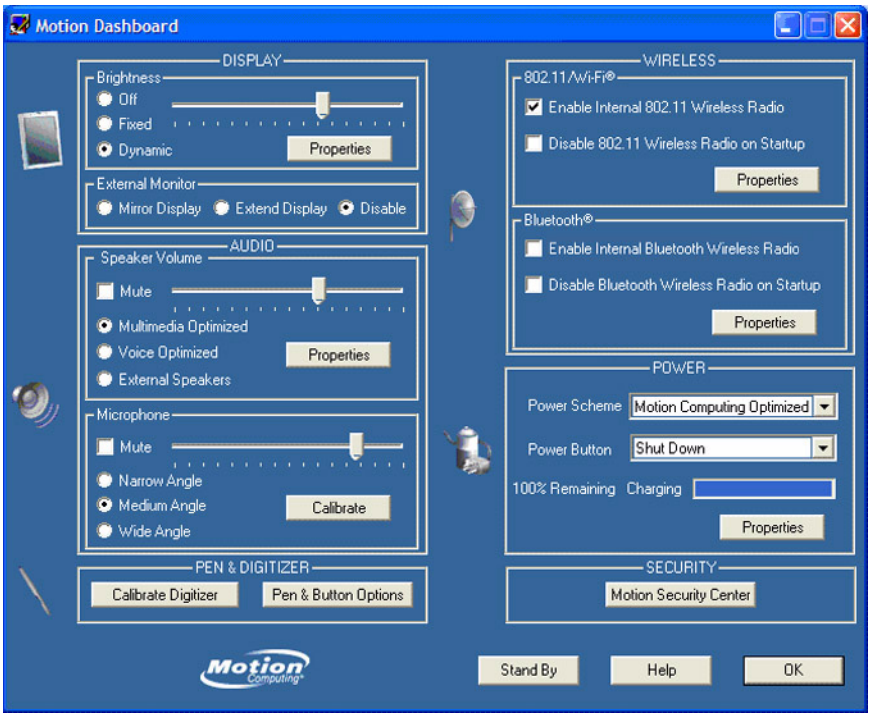
Tap the shortcut **Using Your Motion Tablet** icon on your desktop to open the Using Your Motion Tablet page. Instructions for using the pen, the **Motion Dashboard**, and links to other applications, are included. Also, you can tap the **Motion User Guide** icon on your desktop to open the online Motion Tablet PC User Guide at any time.

Open the Motion Dashboard

The **Motion Dashboard** is an exclusive Motion Computing application that you can use to access programs and functions as well as configure your Tablet PC.

To open the **Motion Dashboard**, press the Dashboard (Hot Key #1) button on the Tablet PC front panel or select **Start > All Programs > Motion**

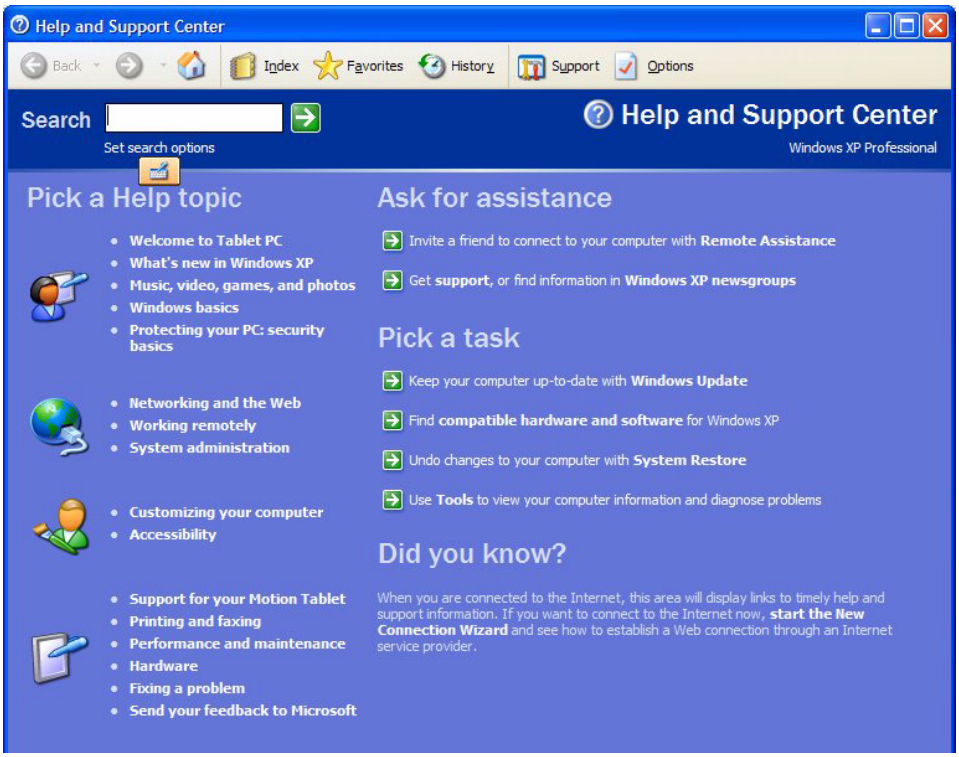
Resources > Motion Dashboard. (Refer to “Tablet PC Buttons, Connectors, and Indicators” on page 9 for a description of the Tablet PC buttons and indicators).



The **Motion Dashboard** can be used to monitor and set some of the most commonly used control panel items for the Tablet PC. For more information, refer to “Motion Dashboard” on page 15.

Visit the Microsoft Help and Support Center

You can find additional information about your Tablet PC and the Windows XP Tablet PC Edition 2005 operating system in the Microsoft Help and Support Center. Access help by selecting **Start > Help and Support.**



Whenever you open the **Help and Support Center** while your Tablet PC is connected to the Internet, the "Did You Know" section checks for updates from Microsoft and Motion Computing, such as system-use hints, or notices from Motion Computing about your Tablet PC.

If this is your first experience with the Windows XP operating system, taking the Microsoft tour is a good way to get started. Select **Start > Help and Support > What's new in Windows XP > Taking a tour or tutorial**.

HARDWARE OVERVIEW

Tablet PC Display

The Motion Tablet PC includes a 12.1-inch display with wide viewing angles. The Tablet PC standard display incorporates the following features:

- A highly-readable, liquid-crystal display (LCD)
- A protective layer that offers a firm writing surface and minimizes glare
- A digitizer panel underlying the display that enables handwritten entry with a specially-designed Motion Digitizer Pen and the TIP
- A wide viewing angle display that provides bright, clear viewing at up to 180 degrees, plus a high contrast ratio, fast response time, and authentic color at any angle
- A digitizer that responds to the Motion Digitizer Pen, but not to a plastic stylus or to finger touches
- A display surface that lets you touch or rest your hand on it without affecting open programs or data input

NOTE: For information about display care, see Chapter 3 of this User Guide.

Tablet PC View Anywhere™ Display Option. The View Anywhere display option was designed to enhance indoor viewing and to improve outdoor viewing while retaining all the standard display features. The bright 12.1-inch XGA TFT display was developed from a proprietary optical enhancement process based on technology initially developed for high-end military aviation and marine applications. The View Anywhere display includes all the features of the standard display plus the following components:

- A protective layer that improves the sunlight contrast ratio and significantly reduces reflection and glare
- Improved sunlight contrast ratio, which enhances viewability at wide viewing angles even further than the standard display
- Enhanced optical display technology with a significant reduction in unwanted reflection and glare and improved light pass-through efficiency

Fingerprint Reader

The fingerprint reader lets you scan your fingerprint and associate it with passwords. This feature offers a quick and convenient way to log on to your Tablet PC, provides global password management, and protects your Tablet PC data from unauthorized access. The fingerprint reader also serves as a scrolling device; you can move your finger vertically (from top to bottom) to scroll the cursor within the active application window.

Motion AC Adapter

The Motion AC Adapter has three components:

- AC power adapter
- Power cord
- AC mini-plug with folding prongs that can be used instead of the long cord when traveling

CAUTION: Use the Motion AC Adapter with your Motion Tablet PC. This adapter should not be used to power any other electronic devices. If you do so, you may damage the accessory or the other device.

Motion Battery Pack

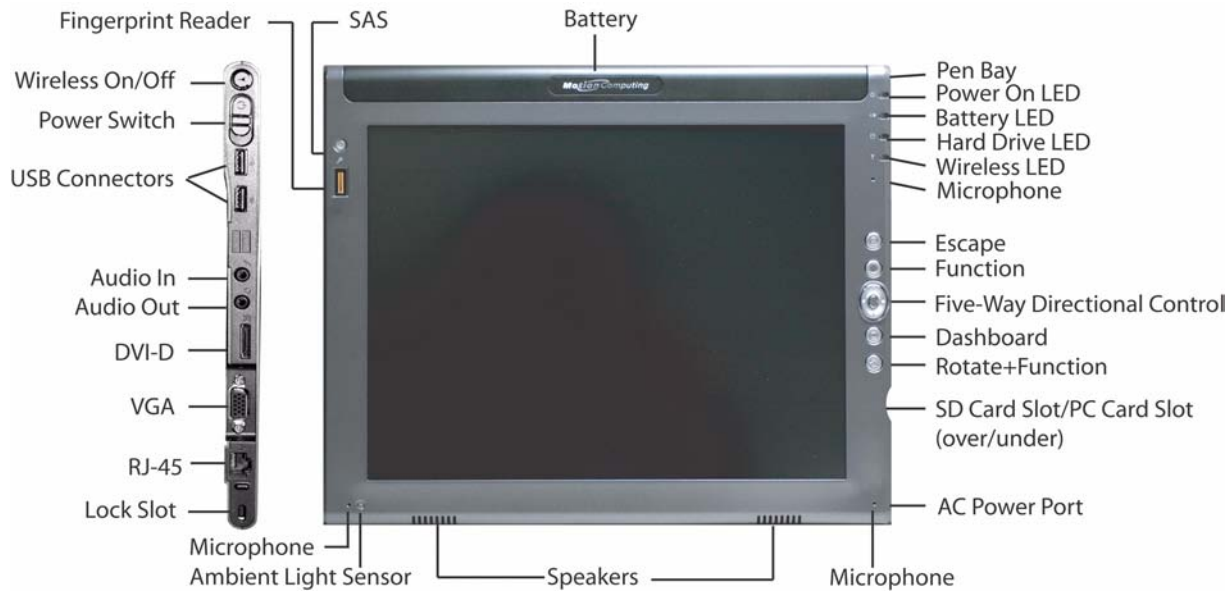
Each Motion Tablet PC ships with a Lithium-ion (Li-ion) battery mounted and latched at the top edge of the Tablet PC. Extra batteries are available from Motion Computing. An optional Extended Battery is available that provides additional hours of continuous operation.

WARNING: To avoid personal injury, handle the battery with care. Do not open, puncture, short, or expose it to fire or water. Keep the battery in an ambient temperature of less than +104°F (+40°C); for example, do not leave it in a closed car in hot weather for an extended time.

For additional safety information, see the *Safety and Regulatory Guide* packaged with your Tablet PC.

Tablet PC Buttons, Connectors, and Indicators

The following shows the buttons, connectors, and other components on the Tablet PC. While there are no controls on the back side of the Tablet PC, there is a sliding panel that covers the Extended Battery connector. This panel must be open before connecting the optional Extended Battery. The connector panel should be closed when not being used.



Tablet PC LEDs, Buttons, Connectors, and Other Components	
Wireless On/Off	Alternately turns wireless on and off; makes it easy to disable wireless on airplanes (button must be pressed and held for 1/2 second to take affect)
Pen bay	Storage area for the Motion digitizer pen; located at upper right edge. A pen tether attachment point is located directly above the pen bay.
Power LED	Displays power status; lights blue when power is on, blinks blue on low battery
Battery LED	Displays battery status; lights amber when battery is charging; blinks blue when in stand by state
Hard drive LED	Displays hard disk drive (HDD) activity - blinks blue
Wireless LED	Displays wireless 802.11 and Bluetooth activity; white for 802.11, blue for Bluetooth
Escape button	Primary function: Escape; secondary function: Alt+Tab
Function button	Press this button then another to activate Secondary button functions
Five-way directional control button	Primary functions: Scrolls Up/Down/Right/Left + Enter Secondary functions: Left arrow—Shift+Tab; Right arrow—Tab; Up arrow—Page Up; Down arrow—Page Down
Dashboard (Hot Key #1) or Windows Journal (with Function)	Primary function: Opens the **Motion Dashboard**; programmable Secondary function: Opens the Windows Journal application

Rotate Display (Hot Key #2)/TIP (Tablet PC input panel)	Primary function: Changes the Tablet PC display orientation; programmable Secondary function: Opens the Tablet PC Input Panel
SAS button	Primary function: Ctrl-Alt-Del; Secondary function: None
Microphones	Work at a natural distance; disabled when an external microphone is plugged in
PC card slot	Holds one Type-II PC Card for memory expansion, Smart Card
SD card Slot	Holds one SD-type card, for memory expansion (SDIO compatible)
Infrared (IrDA) transceiver	An infrared transceiver built into the Tablet PC. Allows communication with other devices compliant with the IrDA standard. Effective range is approximately 3 feet
Power switch	Turns the Tablet PC on and off; can be configured to activate Hibernate or Stand By mode
DVI-D connector	A digital video interface digital connector for attachment to a digital video interface monitor. An optional DVI-D cable is available from Motion Computing. To use a digital video interface monitor you must use this cable with your Tablet PC.
AC power port	AC point of connection for the AC adapter
RJ-45/LAN	Standard RJ-45 connector for a 10/100/1000 Mbps network
VGA connector	A standard DB-15 monitor connector for an external monitor, projector, or other VGA device
Docking connector	Connects the Tablet PC with the Motion FlexDock for the LE series (not pictured in the illustration)
USB ports (2)	Universal Serial Bus; a port for connecting USB 2.0 devices, such as a storage device, mouse, printer, digital camera, or optical disk drives
Audio input/output (2)	Microphone and headset plug; 3.5 mm plug
Speakers (2)	Integrated speakers that are muted when you connect a headset or external speakers
Fingerprint reader	Swipe-type sensor for scanning fingerprints; used for password management and security; also serves as a scroll device in active application window
Ambient Light Sensor	Measures the background light and automatically balances display brightness
Air vent	Active cooling system vent, dissipates heat from the Tablet PC (side and back) (not pictured in the illustration)
External battery connector	An external battery connector is included on the backside of the Tablet PC. It is located under a sliding panel in the upper center of the chassis. The sliding panel must be opened before attempting to attach the Extended Battery.

Front Panel Buttons

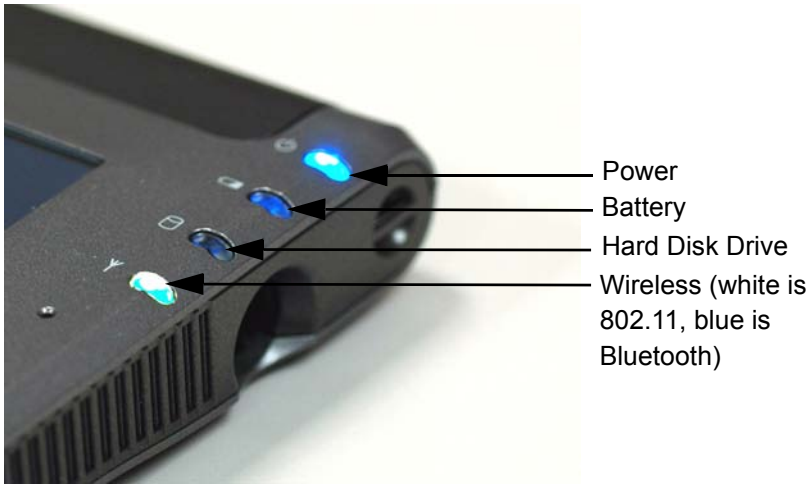
The front panel of the Motion Tablet PC contains six buttons. Most of these buttons have both primary and secondary functions. In addition, some may be re-programmed for other functions. The **SAS** (security) button is located at the top left corner of the Tablet PC.

Front Panel LEDs

The Tablet PC front panel (shown in the illustration) contains status LEDs for the following:

- Power On and Off
- Battery
- Hard Disk Drive
- Wireless

The front panel LEDs are described in the following table.



Front Panel Status LEDs		
LED	**Description**	**Status**
Power/Stand By	Steady blue	Tablet PC is on
	Flashing blue	Tablet PC is in Stand By
Battery Status	See Front Panel Battery Status LED below	
Hard Disk Drive	Flashing/On	Some HDD activity
	Off	No HDD activity
Wireless Activity	Independently flashing white and blue	Wireless is on: White=802.11 Blue=Bluetooth
	Off	Wireless is off

Battery Status LEDs

Your Motion Tablet PC is equipped with a smart battery that provides information about its power status.

CAUTION: To avoid personal injury, or the risk of fire or explosion if the battery is overheated, wait until the battery cools to room temperature before recharging or replacing it.

NOTE: If the unit is operating on battery power, you can move the pen over the Power/Battery icon (shown here and found in the system tray at the

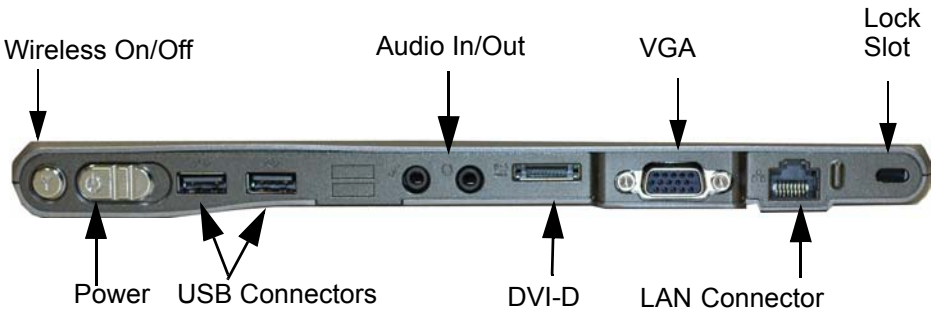
lower-right corner of the Tablet PC display) to see the number of hours of battery life and the percentage of battery charge remaining.

Front Panel Battery Status LED		
Battery LED	**Battery Status**	**Action**
Steady blue	Battery charged (AC plugged in)	None
Amber	Battery charging (AC plugged in)	None
NOTE: When the remaining battery charge is 10%, your Tablet PC issues a Low Battery alarm message in addition to the LED warning. For information about modifying this alarm (you can set it to display a message or to produce an audible warning), refer to “Configuring Your Power Management Settings” on page 31.		
Fast-flashing amber (lasts only a few seconds)	3% battery charge remaining (AC unplugged)	The Tablet PC issues a Critical Battery alarm and automatically goes into Hibernate mode.
Slow-flashing amber	The battery is too hot to charge	Move the Tablet PC/ battery to a cooler environment until the temperature is closer to normal.
NOTE: Hibernate mode attempts to save data in any open programs to your hard disk drive. When you restart the Tablet PC, it should return to the same system status as before hibernation.		
Off	Tablet PC is unplugged from AC power and the system is running on battery power.	Plug the Tablet PC into AC power if you want to preserve battery power.

Refer to “Power Management” on page 31 for more information about your battery and power settings.

Ports, Slots and Connectors

The Motion Tablet PC contains a number of ports and connectors that you can use to attach to input/output and networking devices. The following illustration shows the ports, slots, and connectors that are on the left side of the LE1600 Tablet PC.



USB Connectors. Two USB connectors are included. These can be used to connect any USB device to the Tablet PC.

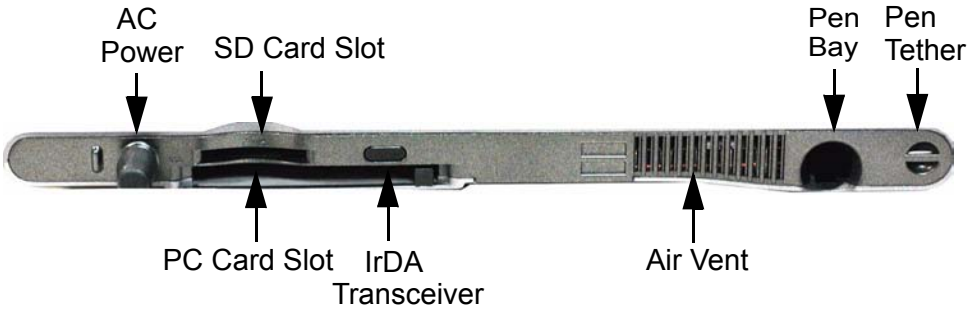
Audio In/Out Connectors. The connectors are marked for microphone input and speaker output connections.

DVI-D Connector. The Digital Video Interface(DVI-D) connector can be used to attach a third-party Digital Video Interface enabled monitor to the Tablet PC. An optional DVI-D cable is offered by Motion Computing for this purpose. Refer to “Mirroring or Extending Your Display” on page 28 about how to set up video that is displayed on an attached external display/ monitor.

VGA Connector. The VGA connector can be used to attach a third-party VGA capable display/monitor to the Tablet PC. Motion Computing does not provide a VGA cable; refer to the information that came with your display for the type of cable to use.

LAN Connector. This is a **Gigabit Ethernet LAN** (RJ-45) connector that can be used to connect to a network, cable modem, or xDSL; it contains two status LEDs.

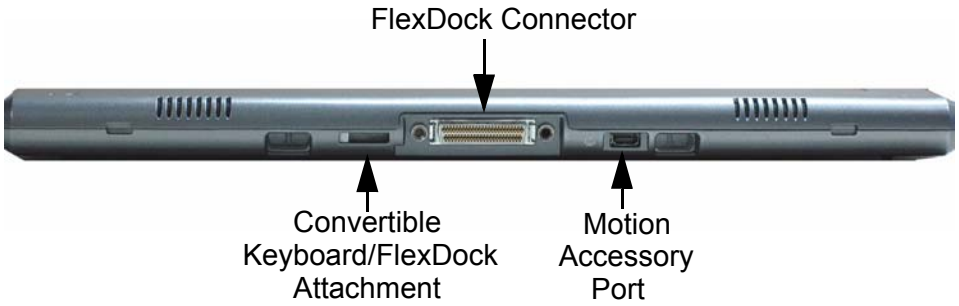
The following illustration shows the ports, slots, and connectors that are on the right side of the LE1600 Tablet PC.



The right side of the Tablet PC contains:

- AC Power port
- SD Card slot for expanded accessory options (SDIO compatible)
- PCMCIA card slot for third-party type-II PC cards
- Infrared (IrDA) transceiver for short distance network connections with another IrDA compliant device
- Pen Bay for the Motion Digitizer Pen
- Pen Tether post for attaching the Motion Digitizer Pen

The following illustration shows the connectors and attachment points on the bottom edge of the Tablet PC.



FlexDock Connector. There is a FlexDock connector at the bottom edge of the Tablet PC. This connector mates with the corresponding connector on the FlexDock for the LE Series to provide the required signal connections when the Tablet PC is "docked." Refer to the Installation Guide provided with the FlexDock for the LE series unit for more information.

Motion Accessory Port. The Motion Accessory port is for connecting input/output devices directly to the Motion Tablet PC, or to the FlexDock for the LE Series when the Tablet PC is mated to the FlexDock. For example, this is the port for attaching the optional external DVD/CD-RW Drive to the Tablet PC - all power to the drive is provided through this port.

Convertible Keyboard. There are two attachment points for mating the Tablet PC to the Motion Convertible Keyboard. When the Tablet PC is attached to the keyboard, the Tablet PC can be angled to provide a comfortable viewing angle.

SOFTWARE OVERVIEW

Your new Motion Tablet PC ships with the standard Motion software, **Motion Security Center**, **Motion Dashboard**, and Motion CDs. In addition, it contains the Microsoft Windows XP Tablet PC Edition 2005 Operating System with a Tablet PC Input Panel (TIP) that includes enhanced ink-to-text experience and word recognition, and an improved security infrastructure that helps defend against viruses, worms, and hackers.

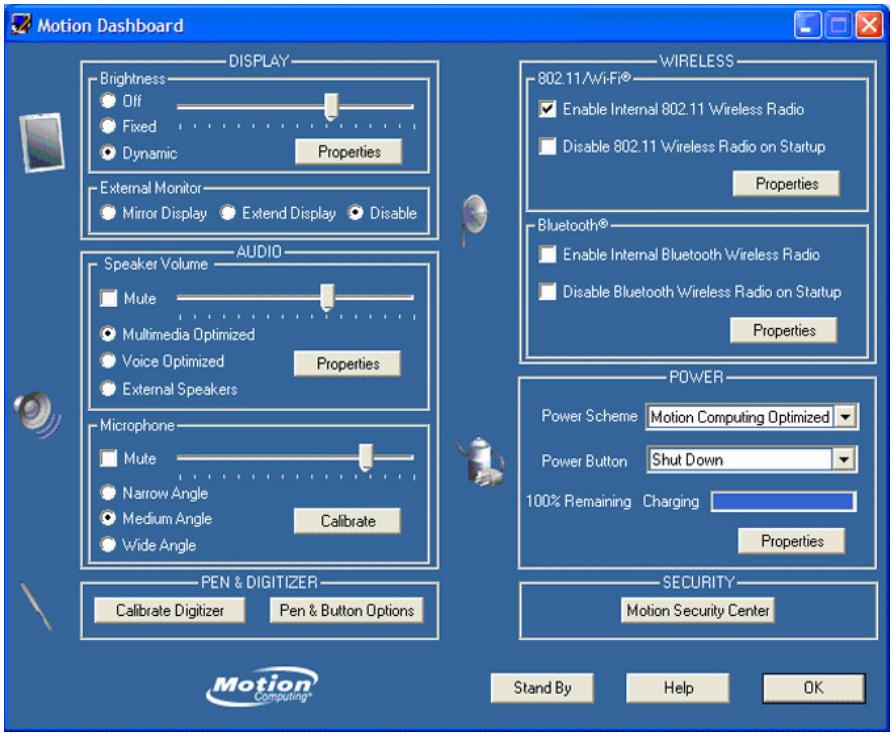
All the software options you ordered have been pre-loaded on your Tablet PC. Software installation files are in the directory c:\windows\motion.

Using Your Motion Tablet

When you start your Tablet PC and go to **Start** > **Using Your Motion Tablet**, you will find pages that describe software applications and utilities to help you personalize and make the most of your system. These pages are opened by your default internet browser. Most of the links on those pages do not require an internet connection; however, you may need an active internet connection to access some of the information.

Motion Dashboard

The **Motion Dashboard** puts many operations at your fingertips for convenient access and control. To open the **Motion Dashboard**, press the Dashboard button (Hot Key #1).



NOTE: The **Motion Dashboard** does not include an “Apply” button. When you change a setting, the change occurs immediately. Tapping “**OK**” on the **Motion Dashboard** closes the window.

Also, if you disable your wireless connection from the **Motion Dashboard**, it may still appear to be working for a short time. The wireless/Bluetooth LED may continue to blink for a few seconds. This is a timing delay; the connection will end shortly.

Motion Dashboard Features	
Feature	**Description**
Display Brightness	The built-in Ambient Light Sensor (ALS) detects light in the environment and automatically adjusts the display brightness. Available settings: • Off — Blanks the display to save power • Fixed — Maintains a fixed brightness level on the display that remains constant under varying light conditions • Dynamic — Uses ALS to maintain a relative brightness level on the display in varying light conditions **NOTE:** For optimal battery life benefits and viewability from ALS, set the brightness scale to the mid-point or slightly above. If the setting is higher than this, you lose some of the battery-saving benefits while gaining minimal improvement in viewability.
External Monitor	The Tablet PC has a dual-head video controller that can “mirror” the Tablet PC display or extend it to a second monitor or external device, such as a data projector. This feature is disabled by default. Available settings: • Mirror Display — Clones or duplicates the Tablet PC display on another monitor or projector • Extend Display — Enlarges the overall desktop work space to include both the external monitor and the Tablet PC display • Disable — Disables the External Monitor feature
Audio - Speaker Volume	Available settings: • Mute the speaker sound; sliding the scale changes the speaker volume • Multimedia Optimized — Best equalization setting for sound reproduction from the Tablet PC for a CD player, DVD, or sound recorder • Voice Optimized — Best setting for voice reproduction from the Tablet PC speakers • External Speakers— Best setting for external speakers or headphones • Properties — Access advanced operating system controls to configure your audio experience. Tap **Volume Control > Options > Properties** to set Playback and Recording for a selected device.

Audio - Microphones	Available settings: • Mute — Sliding scale changes microphone volume • Narrow Angle — Best setting for dictation, Voice over IP (VoIP), or “voice noisy” environments • Medium Angle — Best setting for small group, conference table, or “voice quiet” environments; the microphone detects sounds from a larger area • Wide Angle — Best setting for an open meeting room • Calibrate — Trains the microphones to focus on sounds from a particular location or angle
Pen and Digitizer	Available Options: • Calibrates the pen to the display • Pen and Button Options — Changes Tablet PC, pen, and button properties, such as hot-key assignments, right/left handedness, or the right-click function; enable the eraser for applications that support an eraser.
Wireless	Available Settings: • Enables/disables the 802.11 (Wi-Fi) and/or Bluetooth wireless radio • Disables either or both wireless devices at Tablet PC start up (useful in environments where policy prohibits wireless operations) • The physical wireless button (not on the **Motion Dashboard**) is intended for situations where you want to shut wireless down quickly and reliably.
Power Management	Lets you set power schemes and power button options; also displays remaining battery power. You can select from an extensive list of power schemes or you can create custom power schemes to fit your environment.
Motion Security Center	Opens the Motion Security Center where you can do the following: • Access Motion OmniPass; refer to “Motion OmniPass and Fingerprint Reader” on page 38 • Review or modify Trusted Platform Module settings; refer to “Infineon Trusted Platform Module” on page 47 • Open the Microsoft Security Center to review or modify Windows security settings; refer to “Using Windows Security” on page 48
Stand By	Puts the Tablet PC in a low-power Stand By state for a temporary suspension from which you can quickly resume a Windows session.
Help	Displays **Motion Dashboard** Help application

Motion Security Center

The Motion Security Center consolidates the tablet security applications into one single security management dashboard. It provides the ability to manage the security applications and settings from a single point. You can also find quick links for help with various security-related tasks. Motion Security Center provides access to the Motion OmniPass, Infineon TPM, and Microsoft Security Center applications.

Motion Third-Party Software Solutions

Visit the Motion website at www.motioncomputing.com/products and select Software. You will find links to software solutions to purchase as well as free downloads from Motion software and service partners.

All Motion Tablet PCs come packaged with CDs for the repair and recovery of the operating system and utilities and drivers. Separate application CDs, including the Motion Pak and Microsoft Office Pak software, are optional at the time of purchase.

Chapter 2

Using Your Motion Tablet PC

This chapter is divided into the following sections:

- “Pen and Ink” on page 19
- “Audio and Video” on page 26
- “Power Management” on page 31
- “Security Features and Settings” on page 37
- “Speech” on page 51
- “Ports, Slots and Connectors” on page 56
- “Wireless Networking” on page 57
- “Configuring Buttons” on page 67

Each of these sections includes a brief introduction to the topic, and information on how to access and use the feature or function. Other than a brief introduction to these topics in Chapter 1; all other information regarding the topic, including set up, operating procedures, and helpful hints, is in this chapter.

Pen and Ink

A significant difference between using a standard personal computer or a laptop and your Tablet PC is the use of pen and ink in software applications. Some software applications are designed specifically for pen and ink while others may be “ink enabled” to improve their suitability with ink input. Be aware that you need to turn on the ink in Microsoft Word or Microsoft Excel to be able to write over what is being displayed. You can also use the TIP to enter text directly.

Configuring Tablet and Pen Settings

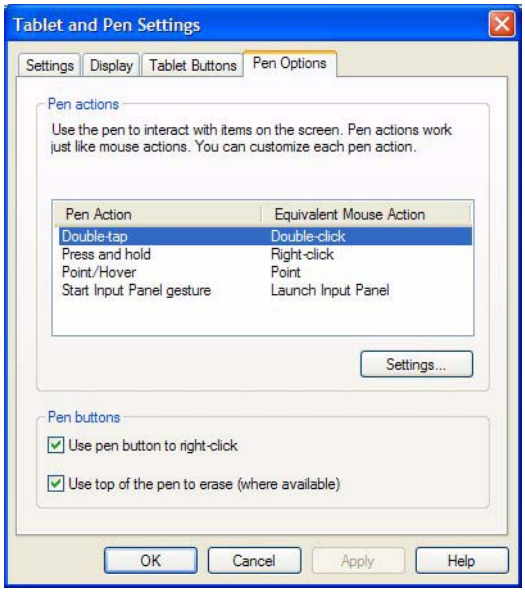
The **Tablet and Pen Settings** window is accessed by tapping the **Pen and Button Options** button in the **Pen and Digitizer** area of the **Motion Dashboard**. Refer to “Tablet PC Buttons, Connectors, and Indicators” on page 9 for a description of the Tablet PC buttons and their default behavior. You can make selections to set up the following from the various sub-windows of the **Tablet and Pen Settings** window:

- **Settings Tab**
  - Select right-handed or left-handed to improve handwriting recognition
  - Set the menu location for right-handed or left-handed display

  - Set the calibration for each orientation
  - Change the rotation sequence
  - Set the display screen brightness
- **Display Tab**
  - Select and preview the primary screen orientation
  - Change the rotation sequence
  - Set the screen brightness for each power setting
- **Tablet Buttons Tab**
  - Set up the front panel buttons
  - Set same for all orientations, or
  - Set different for each orientation
- **Pen Options Tab**
  - Set up the pen and equivalent mouse actions
  - Set up the pen buttons and enable the eraser (application dependent)

Click on each tab and practice setting different options. The default settings may be perfect for your work situation, but if not, the **Tablet and Pen Settings** window lets you set up your Tablet PC according to your unique needs.

The following illustration is a sample **Tablet and Pen Settings** window - this window includes a checkbox to enable the eraser - if your eraser is not functioning properly, make sure this box is checked. Also, availability of the eraser is application dependent; not all software applications allow the top of the pen to be used as an eraser. Refer to the Microsoft Help application for more information about these features (tap the **HELP** button).



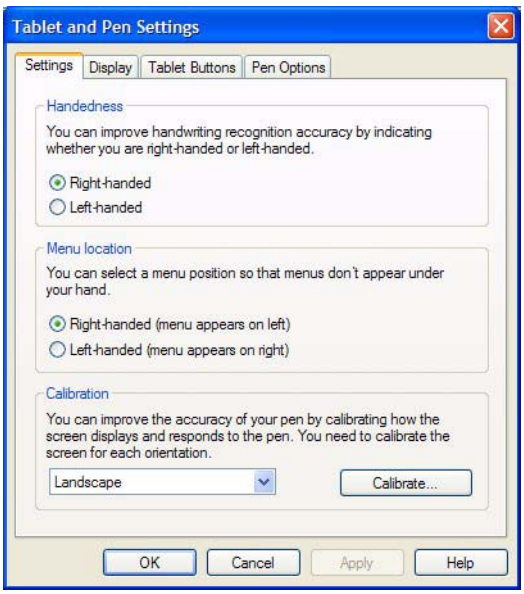
Calibrating and Using Your Digital Pen

Be sure to calibrate your pen in both portrait and landscape orientations the first time you start your Tablet PC, then again at other times if the cursor does not seem to line up with the pen tip. Calibration ensures the accuracy

of the pen and adjusts the input angle for each person who uses it. The Tablet PC stores calibration data and settings on a per-user basis.

1. Open the **Motion Dashboard** and tap **Calibrate Digitizer.** Or double-tap the **Tablet and Pen Settings** icon in the system tray, located in the lower right-hand corner of the display window. This opens the **Tablet and Pen Settings** window.

NOTE: This icon may be hidden in the system tray. Tap the system tray left-arrow to open all hidden icons.



2. Hold the pen naturally, angled as if you are writing with a pen, and tap the pen point in the center of each of the four calibration crosshairs as they appear. During calibration, try to position the Tablet PC as close to the way you will use it as possible, whether holding it in portrait or landscape orientation or using it in a FlexDock for the LE Series or with a Convertible Keyboard. Changing the pen or display angles affects the calibration.
3. If you change the orientation, you may need to calibrate the pen again.

When using the pen as a cursor, you can determine if you are in the right place to select a menu item. For example, look at the position of the pointer on the screen, not where the pen touches the display.

CAUTION: Do not write on the Tablet PC display with ink pens or other sharp objects that could damage it. Do not use markers that could also damage the display.

Refer to the following to compare mouse and pen actions:

Mouse versus Pen Actions	
With a Mouse	**With the Digitizer Pen**
Point and click	Point and tap the pen on the display.
Double-click	Double-tap the pen on the display.
Click-and-drag	Tap-and-drag the pen on the display.
Right-click	Press the pen button while tapping, or press and hold the pen on the display.

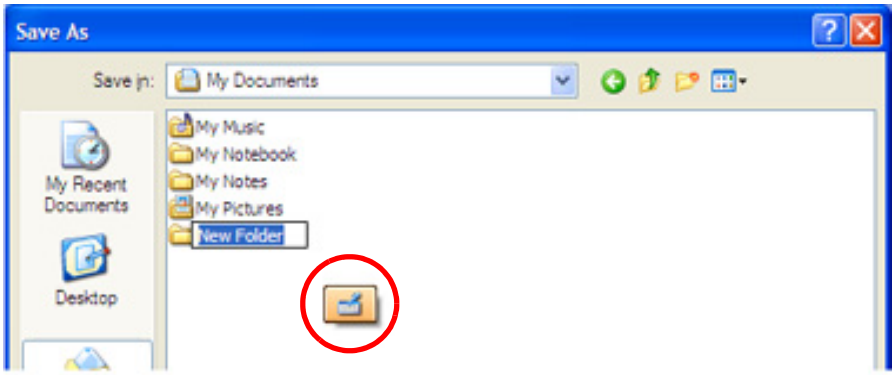
Deactivating Pen Button to End Accidental Right-Clicks. If you find that you accidentally press the pen button when you write, you may want to deactivate this option. (You will still be able to open right-click menus by pressing and holding the pen against the display surface.)

Using the Tablet PC Input Panel

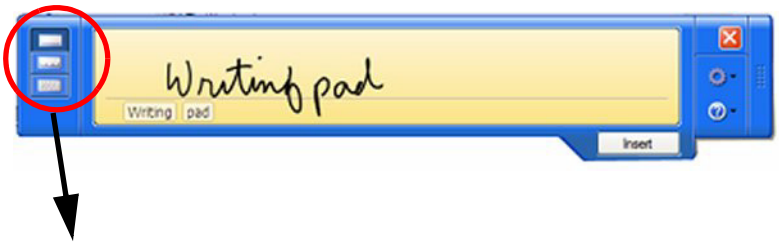
The Tablet PC Input Panel (TIP) is the primary tool for entering text and provides several text correction and control options. The TIP also includes buttons for activating speech recognition and voice command capabilities. It is opened by tapping the TIP icon in the Windows task bar. In some applications, a small TIP icon floats nearby. As you move your pen close to the display; tap that icon to open the TIP.

TIP icon: Tap the icon to open the Tablet PC Input panel (TIP).

Using the TIP. The following example shows how the TIP icon appears in a “Save As” window; you can tap the icon to open the TIP panel to use handwriting or the On Screen Keyboard to enter the name of the New Folder.



When you tap this icon, the Writing Pad opens. As you write, the recognition software interprets the writing and displays a text equivalent below the line.



You can change from the Writing Pad to a Character Writing Pad or On Screen Keyboard at any time by tapping the appropriate icon on the left side of the TIP panel. On the right side of the TIP panel there are icons for Tools and Options and for TIP Help.

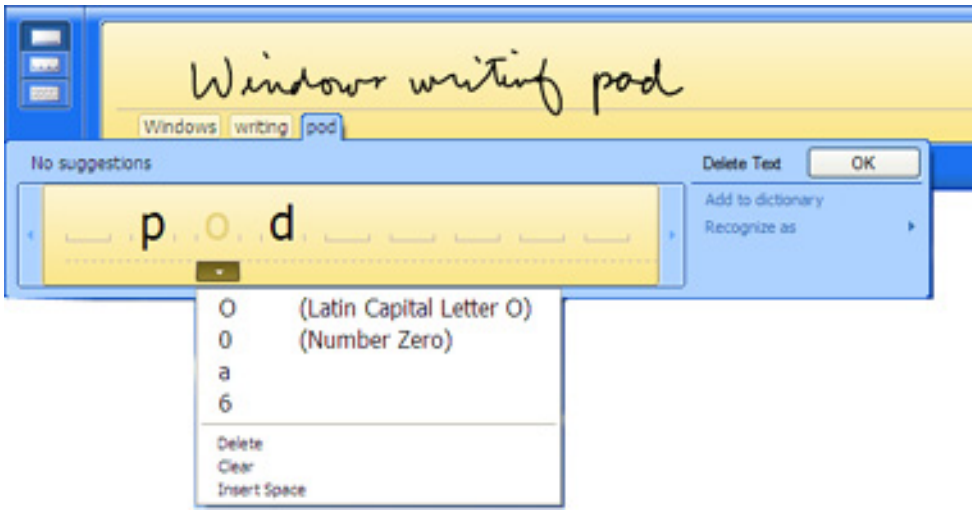
Tap the **Tools and Options** (small gear) icon to access the following selections:

Tools and Options icon

- **Speech** - If this is the first time you selected Speech, a **Speech Recognition Enrollment** window is shown. You must adjust the microphones (using the **Motion Dashboard**) and train for your voice before speech recognition is functional. This can take several minutes. After training, tapping Speech shows that Dictation and Command icons have been added to the TIP panel. Tapping either **Dictation** or **Command** opens a voice input window. For more information about Speech, refer to “Motion Speak Anywhere Technology” on page 51.
- **Dock at Top of Screen**. Moves and locks the TIP at the top of the screen.
- **Dock at Bottom of Screen**. Moves and locks the TIP at the bottom of the screen.
- **Undock**. Closes the TIP if shown; allows it to float undocked the next time it is opened.
- **Options**. Opens the **Options** window, where you can change many of the finer aspects of the pen and its usage in the TIP. There is also a link to Help that is specifically for the Tablet PC TIP.

Using the Writing Pad. As you write, the software selects the best match for a word from its dictionary of words and displays it on screen. Tap on a word to select it.

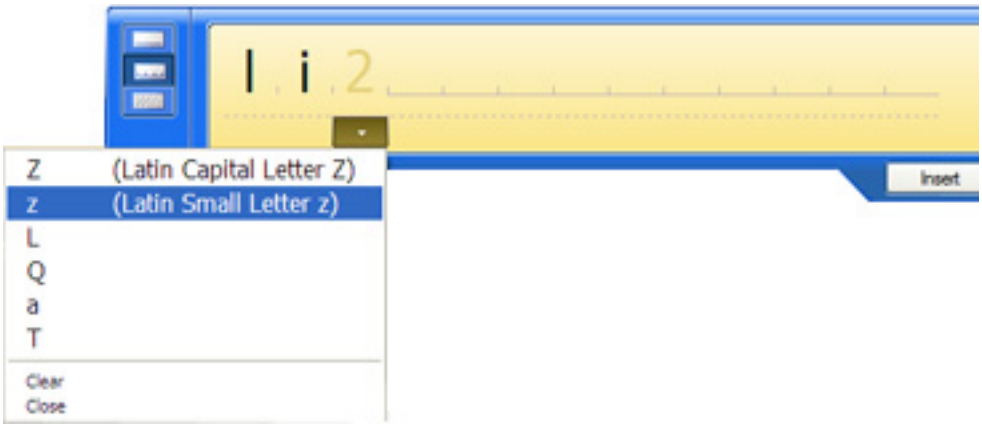
In the following example, either handwrite directly over the incorrect character or tap the character to open a list of alternatives (as shown here: O, 0, a, 6). You can erase a word you have just written, by rapidly scratching back and forth over it.



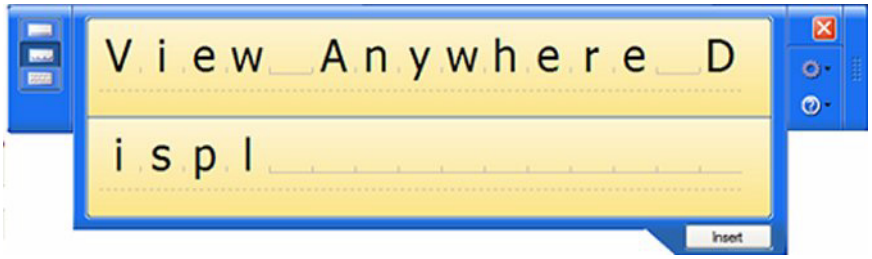
The Writing Pad expands to show Numbers (Num) or Symbols (Sym) toolbars, whose symbols are inserted immediately in the text entry area as you select them. Then, when you begin to handwrite on the Writing Pad, the Num or Sym toolbar closes.

Using the Character Writing Pad. Use the Character Writing Pad for acronyms, equations, or other entries that require individual letters, numbers, or symbols that the writing pad may interpret incorrectly. Some examples include the following: ~<!<@<#<$<%<^ and*()_+<>{}[] \ /. Symbols/letters are displayed in a text equivalent that you can individually correct by:

- Handwriting over the text equivalent in each character space
- Clicking on the arrow under the letter and selecting an alternative from the drop-down menu

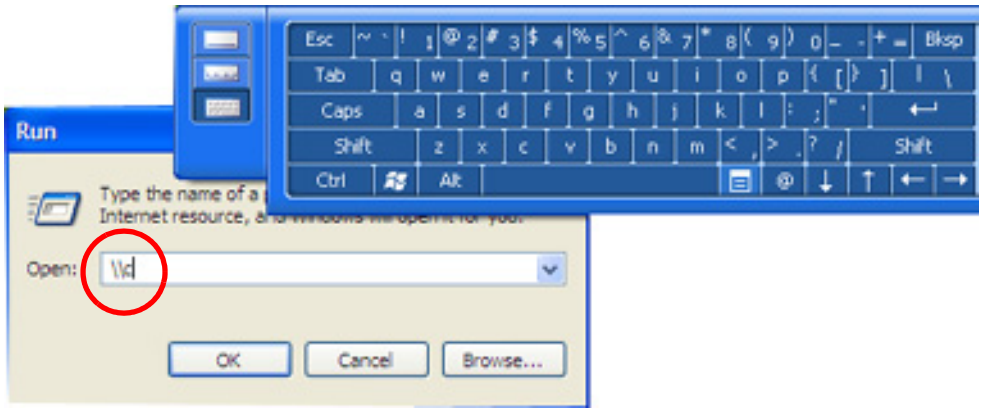


The writing pad expands vertically when you get near the end of the panel.

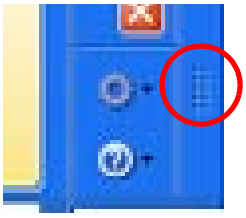


Using the On Screen Keyboard. You can use the On Screen Keyboard to type words, letters, numbers, and characters from keyboard using your pen. For improved security and accuracy, you may want to enter passwords with the On Screen Keyboard instead of handwritten text.

> **NOTE**: When using the On Screen Keyboard, be sure to place your cursor where you want to enter text in the text entry box before you tap **Insert**.



Helpful Hints: Using the TIP Window



- Move the TIP panel on your desktop using the bar on the right - only available when the TIP panel is not docked/locked at the top or bottom of the screen. When it is docked at the top or bottom, it cannot be moved.

- Customizing — Select **Tools and Options** (the gear icon) then **Options**... from the TIP window to open the **Options** window at the **General** tab. You can customize many features in the TIP. Select one or more of the tabs and set the desired options.
- Refer to the Help and the Tutorials that are provided as part of the Windows Operating System. Or refer to the Help information that is provided in the **Options** window.
- In some applications, you may need to double tap to enable pen and ink functions.

Audio and Video

The Audio and Video controls are in the **Motion Dashboard** in the **Audio** and **Display** sections. You will find additional information regarding audio settings and acceptance angles in the **Speech** section of this chapter, refer to “Speech” on page 51.

Motion Dashboard Audio System Controls

The **Motion Dashboard** contains volume and directional controls for both speech recognition and recording functions. You should perform this procedure before you train your Tablet PC for speech recognition or voice commands.

Speaker Volume. While the noise suppression software removes most background noise, in some cases speaker playback (such as background music or intermittent audio messages) can affect recording. In general, reducing speaker volume will eliminate these extraneous noises.

Microphone Volume. The default volume setting for the microphones is at roughly two-thirds of the sliding scale. When recording, dictating, or using voice commands, you may need to adjust this setting until you achieve the desired results.

Adjusting Display Settings and Screen Brightness

The Display settings on the **Motion Dashboard** are used to set the brightness level of the LCD display. These settings are used in conjunction with the Ambient Light Sensor (ALS) to maintain a level of brightness and contrast in all lighting conditions.

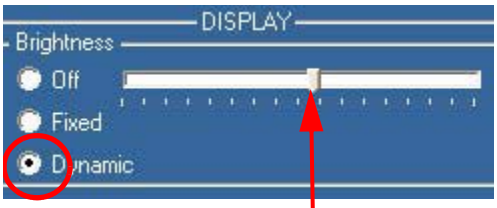
The built-in light sensor located on the Tablet PC front panel measures the ambient light in the environment. The system then automatically balances the brightness of the Tablet PC display in relation to the surroundings. You

can set brightness modes from the **Motion Dashboard** (note: you can also turn the display off).

- Fixed — Sets the display brightness to a fixed level (ALS is off); use the slider to adjust the display to the desired brightness level
- Dynamic — Sets the display so that the system adjusts the brightness to the preferred level under changing lighting conditions while maintaining viewability (ALS is on)

Setting "Dynamic" Display Brightness: ALS On. When you turn on the ALS, the display will automatically brighten if you move from dim to bright light (within the range supported by the hardware), or automatically dim if you move to an environment with a lower level of lighting. You may not be able to visibly detect the adjustment. Using ALS also helps to reduce power consumption when possible.

1. Open the **Motion Dashboard**.
2. Under **Display**, tap the radio button beside **Dynamic**.
3. Move the slider until the Tablet PC display is at the preferred brightness level. The system will then automatically adjust the display brightness to changes in lighting.



Move slider to preferred brightness level.

Setting "Fixed" Display Brightness: ALS Off.

1. Open the **Motion Dashboard**.
2. Under Display, tap the radio button beside **Fixed**.
3. Move the slider until the brightness is at the desired level. The system will keep the *same* brightness level at all times; that is, it will not adjust the display brightness to changes in lighting.

   NOTE: In low-light settings, the "Fixed" brightness setting may keep the display brighter than is needed for good viewability. Keeping the brightness always at the same level may also use more battery power than necessary.

Turning the Display On and Off.

1. Open the **Motion Dashboard**.
2. Tap **Off** in the Brightness area of the Display settings.

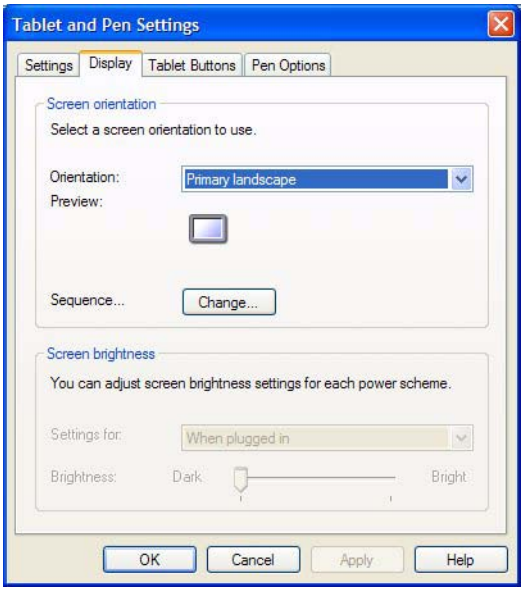
   NOTE: To turn the display back on, wave your pen over the display or press any key on the keyboard. When the display comes on, the **Fixed/Dynamic** setting remains selected as it was.

Changing Display Orientation. An interesting and useful feature of the Tablet PC is the ability to change the screen orientation from landscape to portrait by pressing a button. Also, you can rotate the screen in 90-degree increments. The Tablet PC flexibility in changing the screen orientation allows you to set the view to suit your purpose. You may be using an

application where it is more advantageous to have a portrait (vertical) view of the screen. You may be filling out a form that is longer than the standard screen view. At other times you may want to view a wider than normal page; in this instance you would use landscape view. The Tablet PC provides several ways to change the display orientation quickly:

- The quickest way to rotate the screen is to press the Rotate button (Hot Key #2).

Be aware that changing the screen orientation may require you to recalibrate the pen; refer to “Calibrating and Using Your Digital Pen” on page 20. Use the pull-down menu to see the other orientation settings. You can also change the sequence for rotating from one orientation to another.



Mirroring or Extending Your Display. The Tablet PC has a Dual Head Video Controller that lets you run a presentation from your Tablet PC on an external monitor or data projector while taking notes in ink. You can also move applications onto a second monitor to create additional work space.

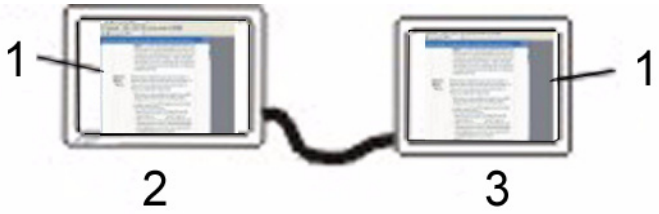
How To Connect the Tablet PC and a Monitor or Projector Example.

1. Plug the VGA monitor cable into the VGA port on the Tablet PC or Motion FlexDock for the LE Series.
2. Connect the external monitor or data projector to a power outlet and turn it on. The software recognizes the external monitor or data projector and searches for a driver.
3. If necessary, install the driver from the CD supplied by the monitor’s manufacturer.
4. Set up the mirrored desktop or external display, using the steps in the following sections.

   IMPORTANT: Be sure to drag any application window back to the Tablet PC display before shutting down the external data projector or monitor. Otherwise, you cannot access the application(s) to shut it down. If you do leave an application open on the extended display, you can disable it from the Windows

Control Panel Display Properties or from the **Motion Dashboard**.

Setting Up a Mirrored Display. Use this feature to connect an external projector for presentations or an extra display on your desk. This example shows a Word document (1) displayed ("mirrored") on both the Tablet PC (2) and an external monitor (3).



Mirrored Display Example: (1) Word document; (2) Tablet PC display; (3) external monitor

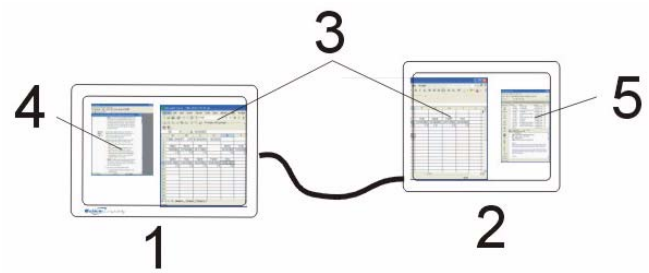
NOTE: The resolution and orientation of the external monitor will be the same as the Tablet PC display.

To Mirror the Tablet PC Display, Do the Following:

1. Open the **Motion Dashboard**.
2. Select the **Mirror Display** radio button under **External Monitor**. This setting automatically creates an identical display on the external monitor.

   NOTE: You can also tap the icon for the Intel Graphics Media Accelerator Driver for Mobile, in the system tray at the bottom right of the Tablet PC display (or found in the Windows Control Panel) to set up this feature from the Graphics Media pop-up menu.

Setting Up an Extended Display. Use this feature when you want to simultaneously open applications on two monitors and significantly expand your workspace without hiding open documents under layers of other work. This example shows the Tablet PC (1) and an external monitor (2) with an Excel spreadsheet extended across both. It also shows a Word document (4) on the Tablet PC and e-mail (5) on the extended desktop.



Extended Desktop Example: (1) Tablet PC display; (2) external monitor; (3) spreadsheet; (4) Word document; (5) email message

To Extend the Tablet PC Display, do the following:

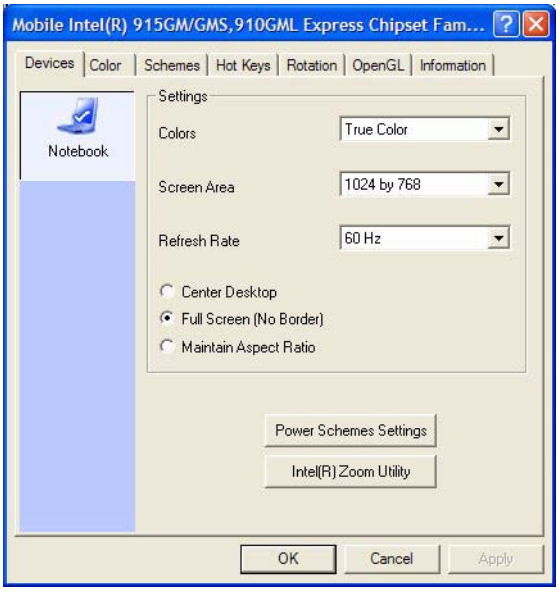
1. Open the **Motion Dashboard**.
2. Tap the **Extend Display** radio button under **External Monitor**. This setting automatically extends the Tablet PC display to the external monitor.

   NOTE: You can also tap the icon for the Intel Graphics Media Accelerator Driver for Mobile in the system tray at the bottom right of the Tablet PC display (or found in the Windows Control Panel as Intel GMA Driver for Mobile) to set up this feature from the pop-up menu, or tabbed window respectively.

Creating Schemes for External Monitors

To create a special screen resolution scheme. This feature can be used to create named schemes for one or more external monitors. After creating and saving the scheme, you can access it by right-clicking on the operating system desktop and selecting the scheme name from the pop-up menu that is shown.

1. Tap the **Intel Graphics Media Accelerator Driver for Mobile** icon in the system tray, located at the bottom-right corner of the display; then select **Graphics Options > Graphics Properties.**
2. This example illustrates the **Mobile Intel 915GM/GMS, 910GML Express Chipset Family** window. From that window, select the **Schemes** tab. The current Video Mode is displayed. (The default mode is 1024 x 768 True Color (60 Hz).
3. Select the desired video mode for the new scheme
4. Tap the **New...** button in this window.
5. Type in a name for the new scheme. Tap **OK** to save the scheme.
6. Highlight this new scheme in the Schemes window.
7. Add or change the parameters for this scheme.
8. Tap **Save**. Right-click on the desktop, select Display Mode and the new scheme name will be displayed.



Helpful Hints: Mirrored and Extended Modes

- Use a mouse pointing device and keyboard to operate in these modes.
- The pen does not work in the external monitor space of the extended mode.
- Refer to Mobile Intel Help for more information about creating schemes for external monitors.

POWER MANAGEMENT

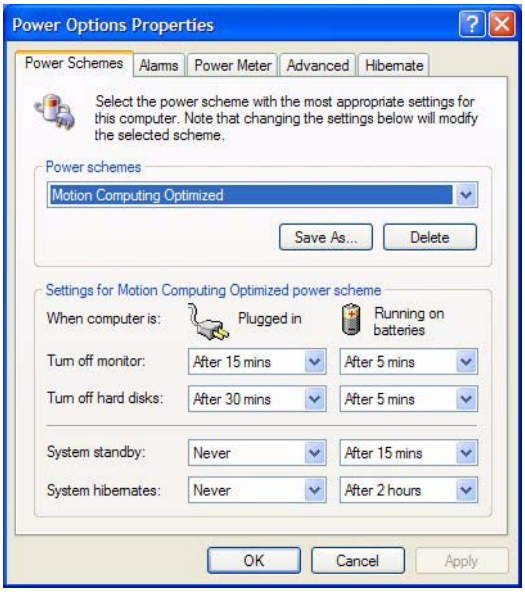
The Tablet PC provides access to a comprehensive suite of power management functions by using the buttons and controls on the **Motion Dashboard**.

Configuring Your Power Management Settings

The following power-related settings can be accessed, monitored or controlled from the **Motion Dashboard**.

- Power schemes
- Alarms for low and critical battery
- Power meter readings for up to two batteries
- Advanced power settings
- Hibernation settings

Tapping the **Properties** button in the **Power** area of the **Motion Dashboard** opens the **Power Options Properties** window. Each of the power options is represented by a tab in this window. Tapping one of the tabs shows the various properties for that aspect of the Tablet PC power management feature. The following example shows the window open at the **Power Schemes** tab; it illustrates the various power schemes properties that can be set for the Tablet PC. The remaining option properties windows are described, but illustrations to show the various options are not included in this User Guide.



Power Schemes. Tap the **Power Schemes** tab to show the **Power Schemes** window. You can select from a set of pre-defined power schemes that apply to a wide variety of home and work environments. Try it yourself by selecting one of the options from the pull-down menu and seeing how your choice affects the power settings. This operation also gives you the flexibility to define your own scheme and keep the same name or rename it to something that makes more sense to you.

Alarms. The **Alarms** tab shows the **Alarms** window. This option lets you specify the point at which battery alarms are activated for both the low and critically low battery level states. You also define the action that the Tablet PC should take when that battery level is reached. For example, you may choose to have the Tablet PC sound an alarm, or you may prefer to receive a text message.

Power Meter. The **Power Meter** tab shows the **Power Meter** window and shows a visual indication of the Battery Status for battery #1 and #2 (if present and attached to the Tablet PC). The icon shows the remaining battery level and the text shows the percentage remaining. You can click on a battery icon to open a detailed information window for that battery.

Advanced. The **Advanced** tab shows the **Advanced** window where you specify the power settings options that you want to use. You can also specify what you want the Tablet PC to do when you press the **Power** switch. Your choices include everything from doing nothing, going into standby mode, to hibernation, or to performing a shut down of your computer.

Hibernate. The **Hibernate** tab opens the **HIbernate** window where you enable or disable hibernation by using the **Hibernation** checkbox. This window also shows information about the hard drive space on your computer and details the amount of hard disk drive space required for safe

hibernation. Selecting Hibernate has the following advantages over placing your Tablet PC in the Stand By state:

- Hibernate saves the state of the desktop and applications
- Hibernate consumes no battery power
- When you return from the Hibernate state, you return to where you were when you entered hibernation.

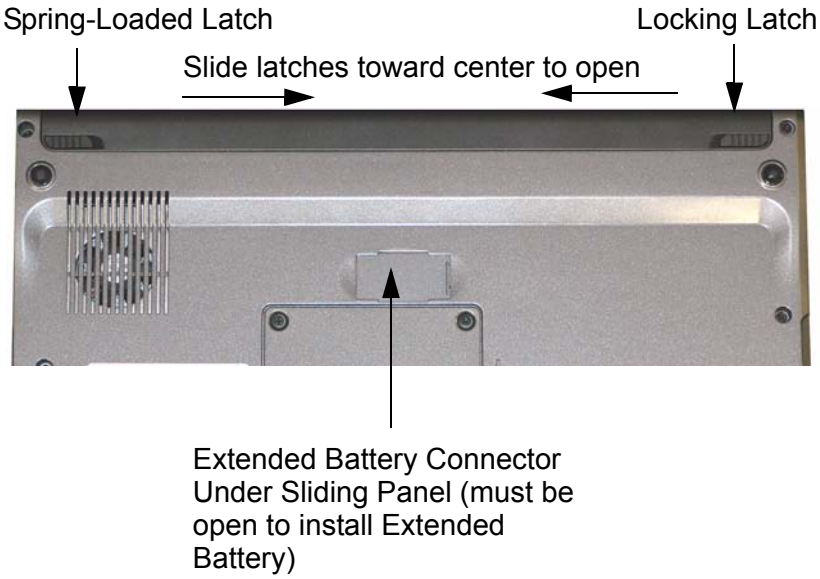
Checking Your Battery Power Level. There are several ways to see how much battery power is left on your Tablet PC. You can determine the remaining battery power by doing any of the following:

- **Reading Battery Power from the Tablet PC Display**

  To check the power level while you are on battery power, move the pen over the Power Meter icon, shown here, in the system tray at the bottom-right corner of the Tablet PC display. This displays the number of hours of battery power and the percentage of battery power left. (Also, the blue area on the battery icon gets smaller as the battery discharges.)

- **Reading Battery Power from the Battery Gauge (requires battery removal)**

  Ensure that AC power is plugged into the Tablet PC, or that the Tablet PC is turned off. Turn the system over so that you are looking at the back and remove the battery from the top of the tablet. The gauge is mounted on the backside of the standard battery. Press the button and look at the LEDs. Each LED represents approximately 20% of the total available charge. (If the optional Extended Battery is attached, the battery gauge is located on the backside of the Extended Battery and can be checked without removal.).



Caution: When you replace the standard battery, make sure that the locking latch is in the correct position, moved fully to the right to lock the battery in place, and that the battery is firmly installed.

- **Reading Battery Power from Motion Dashboard**

  The **Motion Dashboard** also has a battery power gauge that displays the percent of remaining battery charge. If a Standard Battery and a Extended Battery are both attached, the power reading is the cumulative amount of both batteries.

- **Reading Battery Power from the Power Meter**

  Right-click on the Power Meter icon in the system tray, located in the lower right-hand corner of the display window (only visible if you are running on the battery). To see remaining power, tap **Power Meter**; or tap **Adjust Power Properties > Power Meter** tab.

  From the Windows Control Panel (in Classic view), double-click **Power Options**. Or (in Category View), tap **Performance and Maintenance,** then tap **Power Options**.

Using Your Batteries

This section describes how to use your Tablet PC battery. The Standard Battery is located at the top of the Tablet PC. There is an optional Extended Battery that can be attached to the back of the Tablet PC. The upper center area of the back of the system includes a small sliding panel that covers the terminal connections for the Extended Battery.

Caution: Ensure that the sliding panel is open before attempting to attach the Extended Battery. Otherwise, there may be damage to the Extended Battery connector.

Both batteries are designed to be re-charged by using the AC adapter when attached to the Tablet PC.

Charging the Battery. When you connect the Tablet PC to AC power with a battery attached, the system automatically charges the battery until it reaches full charge. If two batteries are attached, the primary battery charges first, followed by the secondary battery. The charging sequence is staggered to ensure that both batteries become fully charged at nearly the same time. The standard battery charges to the 80% level, followed by the Extended Battery charging to the 80% level. Then each battery charges for a short interval until both reach 100%.

The Battery Status LED is on the Tablet PC flashes amber when the battery is at a critically low level and changes to solid amber while charging. When the battery is fully charged, the Battery Status LED is solid blue.

WARNING: To avoid injury, keep the battery within the recommended temperature range when charging it. Wait until it cools to room temperature before recharging it in the Tablet PC or the battery charger. For more information, see the *Safety and Regulatory Guide* shipped with your Tablet PC or the documentation that came with the battery charger. Or go to www.motioncomputing.com/support to view these documents.

To charge the battery:

1. Plug the AC adapter into the Tablet PC, then into a wall outlet or power strip. (Completely recharging the battery may take up to two hours, although the battery reaches an 80% charge in much less time.)

Swapping the Battery. You can swap the Standard Battery while the system is powered on, with or without having the Tablet PC plugged into an AC power outlet.

1. If the Tablet PC is running, open the **Motion Dashboard** and tap **Stand By.** The Tablet PC immediately goes into the **Stand By** state.
2. Alternatively, go to **Start > Turn Off Computer.**
3. Do one of the following:
   - If you are logged on to a domain: When the **Turn Off Computer** window appears, tap **Stand By** or **Hibernate** from the drop-down list.
   - If you are not logged on to a domain: Press the **Shift** key on your external keyboard or tap **Shift** on the TIP On Screen Keyboard to change the option from **Stand By** to **Hibernate**.

   NOTE: Here are some key differences between putting the Tablet PC in **Stand By** or **Hibernate** mode to swap the battery:

   - If you choose **Stand By**, the Tablet PC is designed to maintain your system for up to 30 seconds while you swap the battery.
   - However, you may have less than 30 seconds if you are running a number of programs that drain power faster.
   - You should save any data before putting the system in **Stand By** to swap the battery.
   - Choosing **Hibernate** gives you more time to swap the battery. **Hibernate** saves the status of the Tablet PC to your hard drive.

4. Tap **Hibernate** or **Stand By.** The Tablet PC opens a dialog box stating that it is “preparing to standby or hibernate.”
5. Wait until the system shuts down. In Hibernate, all LEDs are off; in Stand By, the Power LED flashes.
6. Slide the battery release latches on the back of the Tablet PC toward the center and lift the battery upward to remove it.
7. Insert the new battery until you hear the left latch click, which ensures the new battery is correctly seated. Slide the right latch fur-

ther to the right to lock it in place. Check to make sure the latches are fully seated.

CAUTION: To avoid damage to the Tablet PC, install only Motion Computing batteries, which are specially designed for the Tablet PC.

Disposing of Used Batteries. The Tablet PC contains a Lithium-ion (Li-ion) battery that should be disposed of at a hazardous materials recycling center when it is no longer serviceable. Do not throw it in a waste receptacle where it will be sent to a landfill.

Helpful Hints: Battery and Power Management

- Use AC power when available to lengthen the battery's usable life. The battery will charge automatically as you run on AC power, so leave the battery in the Tablet PC while you are working.
- Use AC power when installing software or writing to a CD, and for optimal battery life, when using a CD or DVD player.
- When using battery power, if you leave the Tablet PC unattended, place the system in Stand By or Hibernate.
- Keep in mind that the display, processor, PC Cards, SD cards, wireless cards, and accessory drives all draw on the battery, so adjust properties and disable unused accessories and PC Cards when operating on battery power.
- When using battery power, adjust the power mode and display brightness to lower settings to prolong the battery life.
- Turn off all wireless devices through the **Motion Dashboard** when not being used.
- Enable the Ambient Light Sensor (ALS) through **Motion Dashboard**. See the section "Adjusting Display Settings and Screen Brightness" on page 26.

Security Features and Settings

Motion Computing has strongly embraced the need for enhanced platform-based security for the Tablet PC. The result of that commitment has been to provide an out-of-box, safe computing environment that enables strong security protection and that will serve as the foundation for complementary add-on security technologies. These core security features include password-protected Phoenix TrustedCore BIOS with HDD locking and networking control, a universal security lock slot, the Motion Security Center, a built-in fingerprint reader, a Trusted Computing Group Trusted Platform Module (TPM), and a Smart Card-ready platform.

The Motion Computing Tablet PC includes a comprehensive security solution that is designed to protect the hardware platform, the operating system, and any information stored on the Tablet PC from most potential outside threats. The Motion Security Center includes the following:

- Motion OmniPass
- Infineon TPM
- Microsoft Security Center

Motion Security Center

The Motion Security Center consolidates the tablet security applications into one single security management dashboard. It provides the ability to comprehensively manage the security applications and settings from a single point. You can also find quick links for help with various security-related tasks. Motion Security Center provides access to **Motion OmniPass**, **Infineon TPM**, and **Microsoft Security Center**. Click on those headings to launch the respective application.

Motion OmniPass and Fingerprint Reader

The Motion OmniPass Control Center and the Fingerprint Reader are vital elements of the Motion Security Center. Using this application and the Fingerprint Reader, you can define the security and convenience features of your Tablet PC. When implemented within the security policies of your work environment, the OmniPass authentication tools add another layer of security for your passwords, files, and other logons.

The OmniPass application can be opened by tapping the OmniPass icon (shown at right) in the System tray. Or, you can open the application by opening the **Motion Dashboard** then **Motion Security Center > Motion OmniPass**. The **OmniPass Control Center** window is shown below.

There is extensive help supporting the **Motion OmniPass Control Center**. To get help on a specific topic, tap the **Help** button in the **Motion OmniPass Actions** panel, and use the Search or Index function.

At this point you can choose from the following options:

- Manage OmniPass Users and Settings to add users
- Change OmniPass System Settings
- Manage Your Passwords
- Protect Your Files

Also, notice that there are three selection areas, an action panel and two information panels, at the left side of the window. These areas allow actions or show specific information.

- Action panel
  - Log Off Current User
  - Switch User Identity
  - Password
  - Information
  - Help

- User Information panel
  - Shows current user information
- Version Detail panel
  - Shows version and build Information

Manage OmniPass Users and Settings. When you select this action you are presented with the following options:

- Add a new user to OmniPass
- Remove a user from OmniPass
- Import a new user into OmniPass
- Export an OmniPass profile

These are advanced operations and may not be part of your typical work flow. If you need more information about this aspect of the Motion OmniPass application, refer to the OmniPass Help by tapping **Help** in the **Action** panel.

Other OmniPass Set Up Functions. You can also tap the **Change User Settings** icon; the **Change User Settings** window is opened where you can select from the following operations:

- Audio Settings
  - Use radio buttons to set the desired audio setting
- Taskbar Tips
  - Use radio buttons to set the desired taskbar tip level
- Encrypt/Decrypt
  - Select digital certificate or select an algorithm for encryption
- Enrollment
  - Use the enrollment wizard to create a user account or to enroll new authentication devices (e.g., fingerprint reader, digital certificates)
- Manage Your Passwords
  - Opens the User Name/Domain dialog where you enter the password and domain information to authenticate the user for access to the password vault. There you can change your password.

- Protect Your Files
  - Browse to select files to be encrypted
  - Browse to select encrypted files to decrypt

Fingerprint Reader. The built-in fingerprint reader lets you scan your fingerprint and associate it with a password. This offers a quick and convenient way to log on to your Tablet PC, provides global password management, and helps protect your Tablet PC data from unauthorized access. The illustration at the right shows the bi-directional scan of a fingerprint. You can move your selected finger from left-to-right or right-to-left. Refer to “Helpful Hints: Successful Fingerprint Captures” on page 41 for more information about obtaining a successful fingerprint capture.

The fingerprint reader also functions as a scrolling device; you can move your finger vertically (vertical in relation to the orientation of the Tablet PC) across the scanner to scroll the Tablet PC application within the window.

NOTE: The scroll function is disabled while scanning a fingerprint.

Using Motion OmniPass Security and the Fingerprint Reader. The fingerprint reader built into your Motion Tablet PC lets you scan your fingerprint to log onto your Tablet PC and perform other functions such as accessing email, e-banking, paying bills online, or accessing network resources.

The OmniPass software offers a secure and convenient system for managing your passwords and providing confidentiality for your sensitive data through file encryption.

The procedures for setting up the fingerprint reader are divided into basic and advanced options. For a more successful experience, start with the basic set up before setting the more advanced features.

Basic setup includes:

- Enrolling (your username and password)
- Selecting a finger
- Capturing a fingerprint
- Capturing a second fingerprint

Advanced OmniPass setup features include:

- User management
- User settings
- System settings
  - You can modify the OmniPass startup options
  - You can enable Strong Logon Security to authenticate with a specific security device before showing the windows desktop

- Vault management
  - The vault is a storage area for passwords and dialogs that you have associated with web sites and applications.
- Encrypting and decrypting files
  - You can encrypt any file on your Tablet PC except for system files.
  - Only an authenticated user can decrypt files that have been encrypted.

Descriptions of these features may be found in the OmniPass Help section (open **Motion Dashboard** then **Motion Security Center > Motion OmniPass** and tap the **Help** icon in that window).

Helpful Hints: Successful Fingerprint Captures

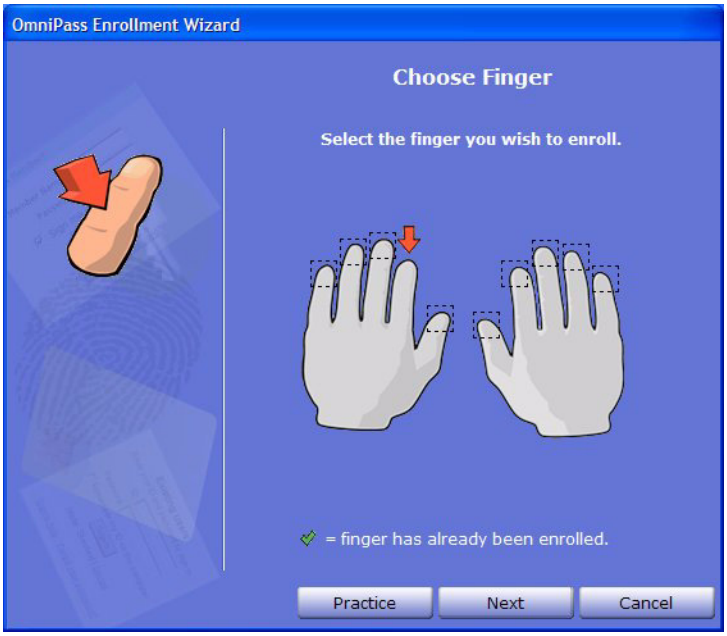
- Be consistent. Hold your finger and scan at the same angle each time. For example, if you enroll your finger with your hand open (or closed), hold your hand this way each time you scan. If you enroll your thumb while holding the edge of the Tablet PC while scanning, you need to scan like this each time.
- The scanner is bi-directional; you can move your finger from right-to-left or left-to-right.
- Read the prompts carefully and make sure you are waiting to be prompted before each swipe.
- Swiping too fast or too slow can make a capture unsuccessful. Change the swipe speed until you learn what speed works best.
- When scanning, press hard enough to fully contact both the nickel-colored ring and the sensor; you do not have to press hard.
- Rub your fingers together to stimulate the natural skin oils so your fingerprint is easier for the sensor to detect. Conversely, wipe your finger off so nothing interferes with the scan.
- If you are repeatedly having trouble getting a good scan, you may need to clean the sensor. First, power down the Tablet PC and remove the battery. Then, clean the sensor using a cotton swab sprayed with a window-type cleaner (no bleach, solvents, or abrasives); then dry the sensor. Do not spray, pour, or otherwise dispense any liquid directly on the sensor.
- If you are having trouble enrolling a specific finger, enroll a different finger. Typically, you will get the best results by scanning an index finger, thumb, middle finger, ring finger, and little finger in that order.

Capturing a Fingerprint

1. Tap **Motion Dashboard** then **Motion Security Center > Motion OmniPass > Manage OmniPass Users and Settings > Add a new user to OmniPass**. This step enrolls a new user; you decide on the authentication method (e.g., fingerprint, digital certificate, TPM, etc.).
2. Type in the User Name, Domain, and the Password (if you have one set up) for this OmniPass account. (This may default to the user name you logged on with and the password associated with it.)
3. Tap **Next** to take you to **Selecting a Finger and Practicing Fingerprint Capture**.

4. When the Choose Finger window appears, tap the dotted area above the finger you want to enroll. A red arrow appears above the selected finger.

   IMPORTANT: To get a feel for finger position and swipe speed, tap **Practice**. “Practice” takes you through all the enrollment steps and helps you get a successful fingerprint scan. You are asked to scan the same finger three times.

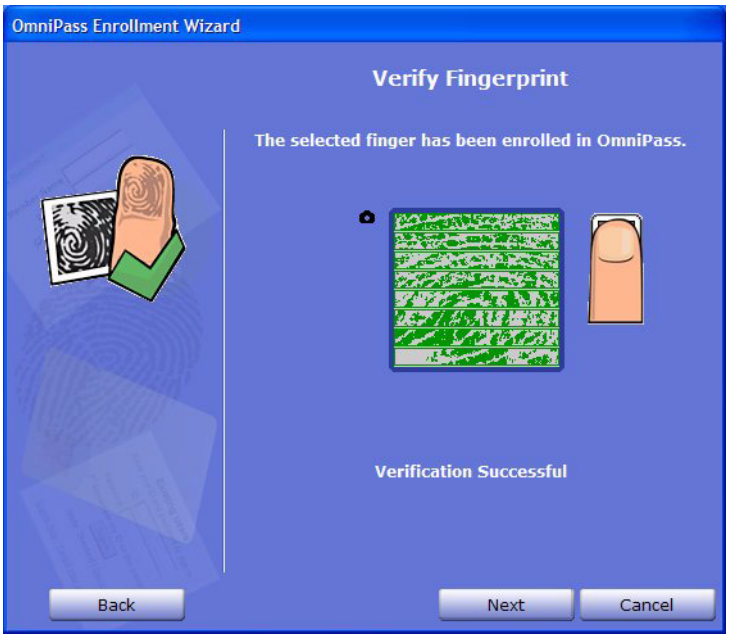


5. After you have practiced, you will be asked to scan one more time for verification. After the verification is successful, tap **Next** to scan your finger again, this time for real (not practice).
6. Place the selected finger over the nickel-colored ring and slowly, with moderate pressure, drag your finger across the sensor from right-to-left or left-to-right. Make sure your entire fingerprint (i.e., your fingertip, not your whole finger) touches both the nickel-colored ring and the sensor surface.

   NOTE: If the capture is successful, you will see a green fingerprint image in the capture area. If the capture is *unsuccessful*, an information message appears, such as “Scan too slow/too fast...” and the green fingerprint *will not* appear. Swipe your finger across the sensor again as many times as required for a successful scan.

7. After the first scan is successful (and a green fingerprint image appears), OmniPass prompts you to scan your fingerprint additional times. Wait until the green fingerprint disappears from the display and the fingerprint image area is blank before swiping your finger again. After OmniPass successfully captures three fingerprints, the **Verify Fingerprint** window appears. Swipe your finger one more time to complete the enrollment.

When the messages “The selected finger has been enrolled in OmniPass” and “Verification Successful!” and a green fingerprint image appear, enrollment is successful and complete.



IMPORTANT: During the verification process, you may get red fingerprint images or the message “Verification Failed.” If this happens, tap the **Back** button and try again. You can have as many tries as you need for enrollment and verification.

8. Tap **Next**. When you are asked if you would like to enroll a second fingerprint, tap **Yes**.

   IMPORTANT: We recommend that you enroll a second fingerprint. A finger injury could prevent authentication and block access to your accounts.

9. Repeat Steps 6-8 to enroll a second fingerprint.
10. Tap **Next**. The Audio and Taskbar Settings window appears. You can leave the defaults or change the settings, as desired.
11. Tap **Next**. The Congratulations window appears. OmniPass recommends that you “Export” (backup or make a copy of) your user profile so you can restore a lost or corrupted OmniPass configuration or encryption keys. See the section “Exporting Your User Profile” on page 46 for more information.

    NOTE: You can export your profile at any time, but this may not be the best time since you are a new user and your profile has little information associated with it. You should backup your profile later and on a routine basis to protect your configuration and any stored passwords and encryption keys.

12. Tap **Done**.
13. Tap **Yes** to log yourself on as a new user.

Capturing a Second Fingerprint Later

Capturing a second fingerprint is a good practice to follow. While it is easier to do this at the time of the initial enrollment, it is possible to capture a second fingerprint later. To do so, open the **Motion Dashboard**, then tap the following: **Motion Security Center > Motion OmniPass > Manage OmniPass Users and Settings > Change User Settings > Enroll Authentication Devices (e.g. enroll a new finger)**. Then follow the procedure to enroll.

Configuring Advanced OmniPass Features

OmniPass offers a number of advanced features that provide additional password management for your Tablet PC beyond the basic convenience of logging on.

> **CAUTION**: Before configuring advanced features, please read the **Motion OmniPass Help**, including any cautions or warnings about features. Activating some features (specifically Strong Logon Security) may, as a normal part of the OmniPass operation, change the way your Tablet PC starts up and/or the start-up options that are available. Before using advanced features, back up your user profile using the feature provided.

To access these advanced features, tap the OmniPass icon in the system tray and open the **OmniPass Control Center**, or open the **Motion Dashboard** then **Motion Security Center > Motion OmniPass**. The following is an overview of these features. For further information, refer to the OmniPass Help.

- **Motion OmniPass > Manage OmniPass Users and Settings**
  - Add/remove users
  - Import a new user
  - Export OmniPass user profiles; user profiles are stored as .opi (OmniPass Import/Export) files

    IMPORTANT: To restore a lost or corrupted OmniPass configuration and encryption keys, back up and store a copy of your user profile(s) in a safe place.

- **Motion OmniPass > Change User Settings**
  - Change user audio settings
  - Change taskbar tips
  - Modify file encryption settings
  - Enroll authentication devices
  - Set authentication rules and policies

    NOTE: For instructions for setting up passwords, refer to “Replacing Password Logons” on page 45.

- **Change System Settings**
  - Startup options for Windows
  - Strong Logon Security
  - Vault Management — Password management for websites, applications, or any password-protected resource
  - Encrypt/Decrypt — Settings for authenticating encrypted/decrypted files

Checking Logon Status. Move your pen over the OmniPass key icon in the system tray to check. A pop-up window shows who is logged on.

Open the **Motion Dashboard**, tap **Motion Security Center** > **Motion OmniPass** or tap the OmniPass key icon and open the **OmniPass Control Center** and look at the Current User/Domain information in the second panel on the left. See the OmniPass Control Center illustration for an example of this window.

Replacing Password Logons. OmniPass lets you replace the password logons at websites or anywhere you are prompted to provide your credentials, such as Internet email, ftp logons, client logons, or any restricted-access network resource. Once OmniPass registers your logon credentials, you can conveniently access any of these restricted areas with your fingerprint. You can also access these sites with your password. Perform the following steps.

1. Go to a site that requires a log on (username and password), *but do not log on yet*.
2. At the site logon prompt, enter your username and password in the fields provided, *but do <u>not</u> tap Enter, Submit, OK, or Logon or any other method that accesses the site*.
3. Right-click the yellow OmniPass key icon that appears in the system tray at the bottom of the screen.
4. Tap **Remember Password**. The Windows arrow cursor will change to the OmniPass “golden key” cursor.
5. Drag this OmniPass cursor to the area on the site where you would normally enter your username and password to log on, but *do not tap “Logon” or “Submit*” yet. (You will complete the logon in Step 9.)
6. If a “Friendly Name” window appears, enter a name that reminds you of the website. OmniPass associates this name with this website.

   NOTE: Verify that the Settings for this Password Site are set the way you want the site authenticated:

   - **Automatically enter ...** — Instantly accesses the site without requiring a password or fingerprint scan. If you are logged in to OmniPass and you access a secure website, OmniPass will automatically submit your user name and password without prompting for verification. If you leave your system unattended and unlocked, this website can be viewed by anyone who has access to your Tablet PC.

- **(Default) Automatically click ...** — Prompts you for your OmniPass/Windows password or fingerprint scan when you access the site.

7. If needed, swipe your fingerprint or enter your master password to authenticate these settings.
8. Tap **OK, Submit**, **Sign In**, or **Logon** to access the site.
9. Tap **Finish** to complete the “Remember Password” procedure. The site location, the credentials to access the site, and the OmniPass authentication settings for the site are now stored in the OmniPass secure database.

Logging Onto a Remembered Site

1. Open a website where you have set up the OmniPass logon (that is, a “Remembered Site”).
2. Swipe your finger when you are prompted for a fingerprint/master password authentication.

   NOTE: You can remove a remembered site through the **OmniPass Control Center > Vault Management > Manage Passwords** option.

Exporting Your User Profile. The OmniPass Help application contains information about exporting your user profile. Go to **Motion Dashboard** then **Motion Security Center > Motion OmniPass**, and tap **Help** in the **Action** panel.

Configuring Strong Logon Security

Strong logon security can be configured to require authentication before showing the Windows desktop. Be aware that enabling strong logon security will force you to authenticate with a specific security device (e.g., the fingerprint reader, a Smart Card) before allowing access to the Windows desktop. Once enabled, the Windows XP Welcome screen and Windows fast switching will not be available on this Tablet PC.

1. To enable Strong Logon Security, open the **Motion Dashboard**, tap **Motion Security Center** then **Motion OmniPass** to open the **OmniPass Control Center**.
2. Tap **Change OmniPass System Settings**
3. Tap **Enable strong logon security**. The **Enable strong logon security** window is shown.
4. Tap the checkbox: **Enable strong logon security.**
5. Tap the checkbox: **Save all changes**. A dialog box tells you that you have made changes that require you to restart your computer.
6. Tap **OK** and restart your computer. During logon you will be required to use the specified authentication device.

Infineon Trusted Platform Module

The Infineon Trusted Security Platform Solution is a comprehensive set of tools provided with your Tablet PC. Together, these tools and the Trusted Platform Module (TPM) result in the one of the most secure computing environments now available on a Tablet PC. With this application it is now possible to create and manage digital certificates for user and platform authentication. The Infineon TPM is not automatically enabled at startup and requires system administrator action to enable the feature.

More Information About the Infineon Security Solution. Ask your system administrator for more information or learn more about the Infineon Security Solution by opening the **Motion Dashboard** then **Motion Security Center > Infineon TPM > Getting Started Guide**.

Windows Security System Components Overview

Among the new security features, the Microsoft **Windows Security Center** automatically sets up a Windows Firewall on your Tablet PC to block unwanted access to your system over the internet and from other networks. The Security Center system provides security alerts during startup and messages while running Internet Explorer. These messages are a normal part of the operating system. Microsoft provides information with these alerts to help you decide what action to take.

In addition, you can set up the firewall to block all outside sources from connecting to your system (recommended) or can make exceptions to allow communications with a certain program. Within these settings, you can change the scope to specify a set of computers for which this port or program is unblocked.

- **Microsoft Security Center** — Lets you check security settings and learn more about improving security. Access is via open **Motion Dashboard** > **Motion Security Center**.

- **Windows Firewall** — On by default; helps protect your Tablet PC against viruses and other security threats, such as intruders who might try access over the Internet or a network. Tap the Windows **Firewall** icon on the Control Panel (Classic view) or the **Security Center > Windows Firewall** icon (Category view). From here, you can add exceptions to bypass selected programs and services. If a program or service needs to open the firewall to perform, it notifies you and lets you decide whether to open the firewall and allow access.

- **Automatic Updates** — Checks for the latest important updates and installs them automatically. Configure from the Microsoft Security Center.
- **Internet Explorer** — Provides security settings to warn you about viruses and other security threats that can spread over the Internet or other types of networks; blocks certain website features and gives you a warning, so you can decide whether it is safe to proceed. Access from Internet Explorer **Tools > Internet Options > Security**. You can always bypass the settings for sites of your choice by changing the options for that site.

Pop-up blocker in Internet Explorer. Stops most browser windows from popping up without your permission, giving you more control over your Web browsing experience. Access from Internet Explorer Tools > Internet Options > Security. You can always bypass the settings for sites of your choice by changing the options for that site.

Microsoft Security Center. The Windows XP Tablet PC Edition 2005 Operating System provides new security features that help defend against viruses, worms, and hackers. To learn more about these features, go to **Motion Dashboard** then **Motion Security Center > Microsoft Security Center** or tap the **Windows Security Alerts** icon in the system tray (this icon only remains active for a short time on your desktop).

Using Windows Security. Passwords protect your Tablet PC from unauthorized access. Passwords can create different levels of protection for your Tablet PC and its data.

- Operating system passwords — Secure the files on your Tablet PC from other users
- BIOS (Basic Input/Output System) passwords — Secure the software routines that test hardware at startup, start the operating system, and support the transfer of data among hardware devices
- System password — Locks access to the BIOS set up
  - Boot password — Locks access to the system
  - Hard Disk Drive (HDD) password — Secures your data so the HDD cannot be accessed by removing it and connecting it to another Tablet PC

Setting the Windows Operating System Password. Be aware that the following advanced procedures require you to make changes in Windows BIOS. You should not perform this procedure unless you are comfortable with the following cautionary information. You can set up a Windows operating system password going to **Start > Control Panel > User Accounts > Create a new account**... (Classic View)

Setting BIOS Passwords.

CAUTION: We strongly recommend that you read the information in this section carefully to understand the implications of setting up a BIOS system password. If you set up a BIOS System password and enter it incorrectly several times, you will be locked out of the system. If you become locked out, you can restart the Tablet PC and retry the password again. You can restart the Tablet PC and re-enter the password as many times as you need to. However, if you are unsuccessful in entering the password, you will not be able to access your Tablet PC.

If this happens, contact Motion Computing Technical Support at www.motioncomputing.com/support for assistance. Have your Tablet PC serial number available (on the label on the back of the system).

The level of security you want on your Tablet PC helps determine what BIOS password(s) you set.

Setting a BIOS System Password. Perform these steps to set up a password to access the PhoenixBIOS™ Set Up Utility on the Tablet PC:

NOTE: These procedures describe using the pen to enter information; you can also attach an external keyboard if you prefer.

1. Start the Tablet PC.
2. When the Motion Computing splash screen appears, quickly press **Hot Key #2**. If you miss the splash screen, turn the Tablet PC off then back on and try this step again.
3. From the PhoenixBIOS Set Up Utility, tap **Security** on the menu bar.
4. To set up a System password**,** double-tap **Enter** next to Set System Password.
5. Type in a System Password using the On Screen Keyboard.
6. Tap **Enter**.
7. Type in the password again to confirm it.
8. Tap **Enter**. The system returns to the Security screen and the System Password reads Set. A password is now required to enter the PhoenixBIOS Set Up Utility.

9. **To set up a Password on boot**, tap **Disabled** next to **Password on boo**t until Enabled is highlighted. You will not be prompted to type in another password because **Password on boot** uses the System password.

   NOTE: You cannot set up **Password on boot** until you set up a System password.

10. If you have finished setting up a password, tap **Exit** or press the **Esc** key on the Tablet PC to exit the PhoenixBIOS Set Up Utility.
11. When you exit, you are asked to select from the following options:
    - Exit Saving Changes
    - Exit Discarding Changes
    - Load Set Up Defaults
    - Discard Changes
    - Save Changes
12. Select the desired action.
13. Confirm the selection by tapping **Yes**.

Hard Disk Drive (HDD) Password. To set up a password to start the Tablet PC (so no one can access the information on the HDD of your Tablet PC even if it is removed and installed in another Tablet PC without the proxy password):

1. Start the Tablet PC.
2. When the Motion Computing splash screen appears, quickly press **Hot Key #2**. If you miss the splash screen, turn the Tablet PC off then back on and try this step again.
3. From the PhoenixBIOS Set Up Utility, tap **Security** on the menu bar.
4. To set the HDD password, double-tap **Enter** next to Set Hard Disk Password.
5. Type in a New Password.
6. Tap **Enter**.
7. Type in the password to confirm it.
8. Tap **Enter**. The system returns to the Security screen and the HDD Password is Set. (When you exit then re-enter the PhoenixBIOS setup, the HDD Password is Locked.)
9. If you have finished setting up a password, tap **Exit** or press the **Esc** key on the Tablet PC to exit the PhoenixBIOS Set Up Utility.
10. When you exit, you are prompted to select from the following options:
    - Exit Saving Changes
    - Exit Discarding Changes
    - Load Set Up Defaults
    - Discard Changes
    - Save Changes
11. Select the desired action.
12. Confirm the selection by tapping **Yes**.

Clearing Tablet PC Security. To clear the Tablet PC PhoenixBIOS security:

1. Start the Tablet PC.

2. When the Motion Computing splash screen appears, quickly press Hot Key #2. If you miss the splash screen, turn the Tablet PC off then back on and try this step again.
3. From the PhoenixBIOS Set Up Utility, tap Security on the menu bar. If you have rebooted, you will be prompted to enter the password(s) you have set up.
4. To clear the System and Password on boot passwords, double-tap Enter next to Set System Password.
5. Type in the Current Password.
6. Leave the space blank next to Enter New Password.
7. Tap **Enter**.
8. Leave the space blank to Confirm New Password.
9. Tap **Enter**.
10. When the Security screen appears, the System Password should be Clear and the Password on boot Disabled.
11. To clear the HDD password, double-tap **Enter** next to Set Hard Disk Password.
12. Type in the Current Password.
13. Leave the space blank next to Enter New Password.
14. Tap **Enter**.
15. Leave the space blank to Confirm New Password.
16. Tap **Enter**.
17. When the Security screen appears, the HDD Password should now display Clear.

SPEECH

Introduction to Speech

The speech recognition capability in the Tablet PC provides two distinct operations; there is a Voice Command mode and a Dictation mode. These selections are visible as buttons in the Tablet PC Input Panel (TIP). The following steps lead to success in setting up the speech feature.

- View the tutorial on speech recognition
- Set acceptance angle and the skew using the Motion Dashboard
- Adjust microphone volume
- Go through training

Dictation mode requires additional training and results in converting your spoken words into “typewritten” text. The Voice Command and Dictation modes are described in this section.

Motion Speak Anywhere Technology

The Motion Speak Anywhere™ audio system combines the Knowles® Acoustics IntelliSonic™ software application with integrated microphones to let you record audio, dictate notes, and use voice commands without the need for a microphone headset. These capabilities make the Motion Tablet PC with Speak Anywhere technology a valuable tool for mobile users in a variety of work settings, including small or large groups, or for individual dictation or voice commands.

- Integrated microphones, two of the three are used at one time — The integrated microphones help optimize the sound capturing capabilities of

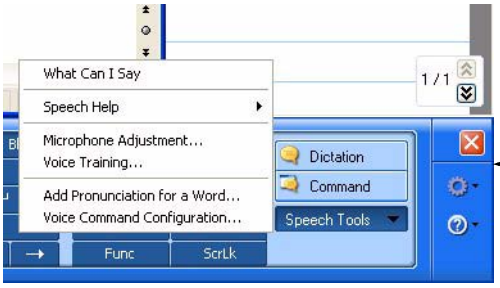
the Tablet PC for speech recognition and voice recording. The locations of the microphones have been carefully designed to let the system detect sound input from a specific angle, rejecting sounds from outside that angle. There are three microphones; the software determines which two of the three provide the best results.

- Knowles Acoustics IntelliSonic software — This software lets you direct sounds coming from a specific direction to the microphones, while canceling interfering noise from other directions, thus minimizing the effects of environmental noise and eliminating acoustic echo feedback. It is based on the following audio technologies:
  - Array Processing or “beam forming” software — Removes all sound outside a software-defined “angle of acceptance”
  - Noise Suppression — Removes background and ambient noise
  - Acoustic Echo Cancellation (AEC) — Removes echo caused by the microphone picking up the system’s speaker output, thus preventing feedback

Speech Recognition

Speech recognition lets you convert spoken words into typed text or into voice commands, you can use speech to correct errors, format text, or control programs. This is sometimes quicker than typing or writing text.

Before you can use speech recognition, you must first train the system for your voice, pronunciation, speaking pace, and inflection. These adjustments are made through the Speech utility on the TIP window. Speech recognition, including dictation and voice commands is available through the TIP window. Tap the **Tools and Options** icon in the TIP. If this is the first time you have activated Speech, you will be asked to complete the Voice Training application. The more training you do, the better the speech recognition.



Tap here to activate speech recognition

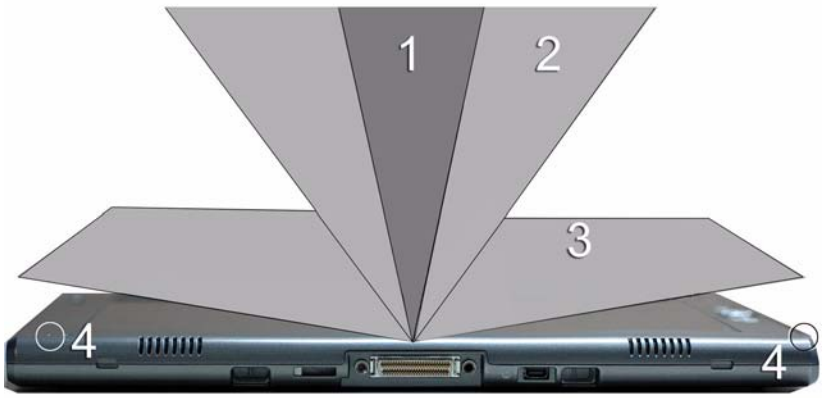
- Dictation mode — Selected by tapping Dictation. Changes everything you say to text; use to enter text directly into any document or text box when you do not want to use the pen or keyboard
- Voice command mode — Selected by tapping Command. Listens for specific words that correspond to an existing list of available voice commands; use to quickly switch between programs, for saving documents, etc.

NOTE: To turn off speech, tap the button for Dictation or Command (whichever you are using).

For additional information about setting up speech recognition, you can tap Help (the Question mark in the circle) on the TIP window and search for “speech.”

Using Motion Dashboard Directional Controls. The Microphone settings in the **Motion Dashboard** include three radio buttons that define the directional angle that is to be used for speech recording. The selected setting determines the angle of acceptance. The following information is intended to help you understand the differences between the narrow, medium, and wide angles. However, the best reference will be your actual experience in using the technology. There are three microphones, but only two are used at one time. If you are in landscape mode, the microphones along the bottom edge (as viewed in primary landscape mode) of the Tablet PC are used. If you are in portrait mode, the two microphones along the right side are used.

- **Angle of acceptance**. Three pre-defined “angles of acceptance” are part of the Motion Speak Anywhere audio technology:
  - Narrow Angle — Best setting for dictation, Voice over IP, “voice noisy” environments; the microphones detect sound on a narrow angle near the bottom center (landscape orientation) or top center (portrait orientation) of the display. If you do not speak within the angle of acceptance, e.g., if you turn your head while dictating or change the angle of the Tablet PC, the sound will not be recorded.
  - Medium Angle (default) — Best setting for a small group, conference table, “voice quiet” environment; microphones detect at a wider angle
  - Wide Angle — Widest angle of acceptance. Try starting with this setting (even for dictation) before using a more restricted angle. Change to the Narrow or Medium Angle to eliminate more background noise.



1 Narrow Angle; **2** Medium Angle; **3** Wide Angle; **4** Microphones (only two of the three are shown in the illustration).

- **Skew angle**. The pre-set sound detection area is straight in front of the system display. If you want the system to receive sound from

elsewhere, you can skew the receiving direction towards one or the other microphone (keeping the same relative angle of acceptance.

Setting up the skew angle:

1. Open the **Motion Dashboard**.
2. Under Microphone, tap **Narrow Angle** or **Medium Angle**. (You cannot calibrate wide angle.)
3. Move to where you want the microphone to detect your voice.
4. Tap **Calibrate**. A block of text appears.
5. Read the text aloud, speaking normally towards the Tablet PC microphones. This should take 20-40 seconds.

   NOTE: In many cases, you will not need to calibrate the microphone because the audio system filters out many unwanted sounds. If you are dictating in an office or recording during a meeting, the audio system may work well with no additional calibration.

   IMPORTANT: The audio system does not store calibrations. If you change to another angle/position and then return to the previous one, you must re-calibrate the audio system.

Enabling Speech Recognition Enrollment. It is necessary to train the system to your voice before you can use the Speech Dictation and Voice Command capabilities of the Tablet PC. The procedure is used to adjust the microphones and train the Tablet PC for the characteristics of your voice. The entire process takes about 10 minutes. It is advisable to move to a quiet environment before starting this procedure.

1. Open the **Motion Dashboard** and make sure the speakers and microphone are turned on (the default settings).
2. Check that the speaker volume and microphone sound levels on the **Motion Dashboard** are appropriate for your setting.
3. Tap the TIP icon on the menu bar at the bottom of the Tablet PC display. The TIP appears.
4. Tap the down-arrow beside Tools to open the Tools options.
5. Tap **Speech**. The first time you access this function, a Speech Recognition Enrollment message appears. You must adjust the microphone and train speech recognition before continuing. Until you complete speech training, the speech button is inactive. This takes about 10 minutes.
6. Tap **Next** and follow the Microphone Wizard.

   NOTE: To improve speech recognition, run additional speech training sessions.

Using Speech Recognition: Setting Up Dictation or Voice Commands.

Once you activate speech recognition, depending on your work setting (single-person office or small or large meeting) and what you plan to do (dictate, use voice commands), you may want to change the **Motion Dashboard** microphone angle from Medium (the default) to either Narrow

or Wide. You may then also want to calibrate the direction of the microphones.

1. Open the **Motion Dashboard** and select the desired angle.
2. (Optional) To use either Medium or Narrow Angle to dictate from a direction other than directly in front of the display, tap Calibrate and read through the calibration script.

   NOTE: Calibration will skew the angle at which the microphones detect your voice while keeping the same relative angle of acceptance.

3. To start the Speech recognizer, open the TIP window.
4. Select **Dictation** (to convert spoken words into typed text) or **Commands** (to use your voice to enter commands, such as “Enter,” “Save,” “Open”).

   NOTE: For more information about using this feature and for available voice commands, see the Windows Help and Support Center where you can search for topics about speech recognition and training. Also available are the speech tutorials. To find the speech tutorials, select **Start > Help;** then **Support > Welcome to Tablet PC > Tablet PC Tutorials**.

Helpful Hints: Dictating and Recording

- You may want to start recording or dictating from the Wide Angle (**Motion Dashboard** setting) and change to a more-restricted angle (Narrow or Medium) if too many outside sounds are recorded. The advantage to the Wide Angle is that no sounds will be lost if you change your location. The disadvantage is that outside sounds may be picked up that interfere with the recording.
- You MUST recalibrate the microphones if you change from one orientation (landscape) to another (portrait). This is because the skew angle changes and the sound will no longer be in the angle of acceptance. If necessary, refer to the earlier information on skew angle.
- Even with the Narrow Angle setting, if a sound is loud enough and within the angle of acceptance (no matter how distant), the sound will be picked up by the microphones. The advantage of the Tablet PC is that it detects fewer extraneous sounds than other audio systems. You can further limit the detection of these outside sounds by turning down the microphone volume and speaking louder; this reduces the microphones’ range and restricts their ability to detect extraneous sounds.
- The Tablet PC contains pre-installed audio components. If you install a third-party audio device (such as USB or Bluetooth devices), the Motion-installed audio may not work. If this happens, you must *reinstall* the Motion-audio components. (The Motion audio components are the SigmaTel and Knowles Acoustics audio drivers.) After you install these, if you still have problems recording, contact Motion Technical Support or the Bluetooth or USB manufacturer’s technical support.
- To improve speech recognition, run additional speech training sessions. Open the Windows Control Panel and select Speech to perform addi-

tional speech training. As you do this, speech recognition accuracy will gradually improve.

Ports, Slots and Connectors

PC Cards

The PC Card slot (also referred to as a PCMCIA card slot), located on the right edge of the Tablet PC, holds one Type-II PC Card for networking, memory expansion, or accessory connection.

1. To install a PC Card, insert it label side up.
2. To remove a PC Card, push the button next to the slot until it pops out.
3. Push it again to eject the PC Card.

NOTE: Your Tablet PC ships with a plastic blank card in the PC Card slot. When the slot is not in use, we recommend that you leave the plastic blank in place.

SD Cards

The SD Card slot, located just above the PC card slot on the right edge of the Tablet PC, holds one SD Card for networking, memory expansion, or accessory connection.

1. To install an SD Card, insert it in the slot, label side up.
2. To remove the SD Card, grip the edge of the card and carefully pull it from the slot. Notice that the edge of the Tablet PC is curved slightly in the area of the SD Card. This makes it easier to grip the edge of the card for insertion and removal.

Infrared (IrDA) Port

The IrDA port is located on the right edge of the Tablet PC near the SD Card slot. The infrared connection protocol allows transfer of data or digital images from any IrDA enabled device to the specified file location on the Tablet PC. Typically, the devices must be within three feet of each other.

USB Ports

There are two high speed USB ports on the left edge of the Tablet PC. These can be used to attach any USB device to the Tablet PC. Typically a USB device draws power from the Tablet PC and it is advisable to use AC power when one or more USB devices are attached. Running USB devices while on the battery power will affect your power consumption.

Speaker Port

The speaker port is on the left edge of the Tablet PC. It is marked with a small headphones symbol and is designed as an audio output channel only. You can attach external speakers or headphones to this port. When headphones or external speakers are attached, the internal speakers are disabled.

Microphone Port

The microphone port is on the left edge of the Tablet PC. It is marked with a small microphone symbol and is designed as an audio input/line in channel only. You can attach an external microphone directly to this port to enhance your audio recording capabilities. When an external microphone is attached, the built-in microphones are disabled.

DVI-D Connector

The DVI-D (Digital Video Interface) Connector is on the left edge of the Tablet PC and is identified by the DVI-D designation. This connector is provided for the direct attachment of a digital video monitor. An optional DVI-D cable is available from Motion Computing for this purpose. When an external monitor is attached, the **Motion Dashboard** display settings can be used to set the external display as a mirrored or extended display.

VGA Connector

The VGA Connector is on the left edge of the Tablet PC. It is intended for use with standard analog video displays. An attachment cable is not provided for this purpose; if you use the Tablet PC with a standard VGA-type display, you will need to purchase a corresponding cable. When an external monitor is attached, the **Motion Dashboard** display settings can be used to set the external display as a mirrored or extended display.

Docking Connector

The Docking Connector is at the bottom edge of the Tablet PC. It is designed to integrate the Table PC with the new Motion FlexDock for the LE Series. When the Tablet PC is used with the new FlexDock, the port connections on the Tablet PC are replicated on the FlexDock. For more information about the new FlexDock for the LE Series, contact your Motion sales representative or visit the Motion Computing website at www.motioncomputing.com/accessories.

Wireless Networking

There are three technologies available in the Tablet PC for wireless networking connections.

- Wi-Fi (802.11)
- Bluetooth
- Infrared

Wi-Fi (802.11) Wireless Connections

> **IMPORTANT**: Since wireless set ups differ widely, the information presented here is general and may not cover all the steps required for your wireless configuration. For more information about wireless networks, you may need to contact your System Administrator. Or, go to **Start > Help and Support** and search for wireless help from Microsoft.

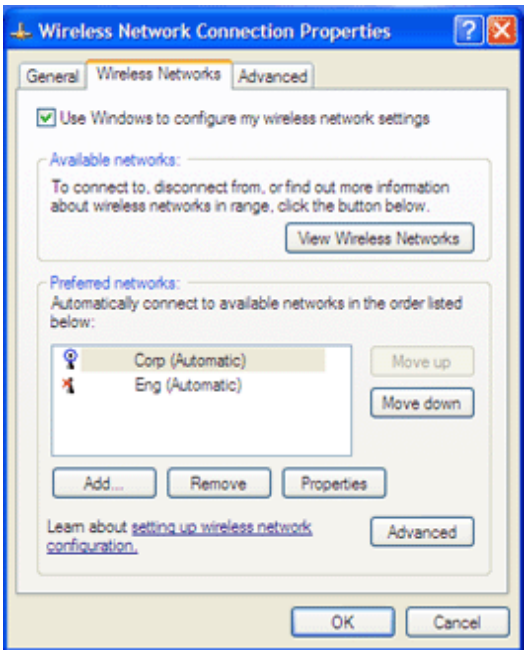
Although wireless access is available in public areas, your ability to use the wireless access point depends on the following conditions:

- Distance from the access point
- Ability to connect to the access point
- Service rights to it (which may require an account fee, user name, password, an/or network set up through an administrator)
- The access point is not broadcasting a network name (Check your security settings, the SSID may not be broadcasting)
- The security settings may not be configured properly for wireless networking.

WARNING: FAA regulations require that you disable any wireless connection when traveling by air. If the Wireless LED on the front of the Tablet PC is off, *internal* wireless communications are disabled.

Enabling/Setting Up a Wireless Connection Through the Motion Dashboard.

1. Open the **Motion Dashboard** and make sure that **Enable Internal 802.11 Wireless Radio** is checked.
2. Under **Wireless** on the **Motion Dashboard**, tap **Properties**.
3. In the **Wireless Network Connection Properties** window, tap the **Wireless Networks** tab.



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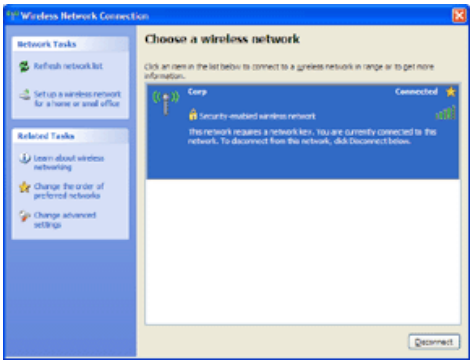
4. In the Wireless Networks window, tap **View Wireless Networks** to see a list of available networks



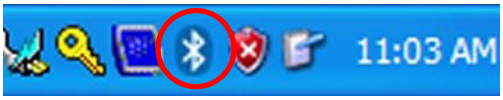
5. Highlight the network you want to connect to and tap **Connect**.
6. Tap **OK**.

NOTE: If you are on a secure network, you may also need to enter a network key.

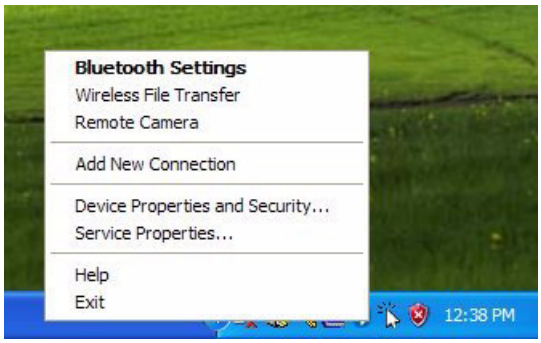
Bluetooth Wireless Connections

The internal Bluetooth wireless radio in the Tablet PC is disabled by default. This setting is found in the **Motion Dashboard**.

Bluetooth software comes pre-installed on your Tablet PC. To begin using Bluetooth, open the **Motion Dashboard**, and check the box that enables your internal wireless Bluetooth radio. The Bluetooth software completes it's installation.



How To Access Bluetooth. When you first enable Bluetooth on your Tablet PC, you will see a Bluetooth icon in the system tray. This icon offers shortcuts to the **Bluetooth Settings** window, the Bluetooth File Transfer Wizard, and the Add New Connection Wizard. Press and hold the pen tip on the **Bluetooth** icon to open the **Bluetooth Settings** menu.



Bluetooth Device Connection Process. The following process is generally common for connecting most Bluetooth devices (keyboard, mouse, printer, cellular phone, PDA, Tablet PC, notebook PC, etc.). The actual steps may be slightly different for every type and brand of Bluetooth device. Read and follow the installation instructions included with your

specific device. These are the four generic steps for connecting to a Bluetooth device.

1. Discover
2. Search
3. Pair
4. Connect

1. Make the device discoverable. Making a Bluetooth device discoverable makes it visible to other Bluetooth devices. Each Bluetooth device uses a different method (pressing a button or key combination) to make it discoverable; this is generally described in the device's documentation.

2. Search for Bluetooth devices in range. This process will find every Bluetooth device *that is discoverable and available for connection* within 33 feet (10 meters).

3. Pairing. Using a passkey creates a secure connection (pairing) between the Tablet PC and Bluetooth device. This passkey helps prevent data from being intercepted and interpreted by another device.

> **IMPORTANT**: Though the passkey exchange helps to secure your data, Bluetooth wireless technology should not be considered completely secure.

4. Connect the devices. The first time a Bluetooth device is connected to the Tablet PC the drivers are loaded for that device. After this initial connection, some Bluetooth devices may disconnect when they go into power-saving mode. Most will automatically reconnect when they become active again.

Using the Bluetooth Application

1. Make sure that either the Bluetooth LED is flashing or that there is a checkmark beside **Enable Internal Bluetooth Wireless Radio** (both indicate that Bluetooth is running) in the **Motion Dashboard**
2. Using your pen, single tap the **Bluetooth Devices** icon in the system tray.
3. Tap **Add New Connection** to launch the Bluetooth **Add New Connection Wizard**.

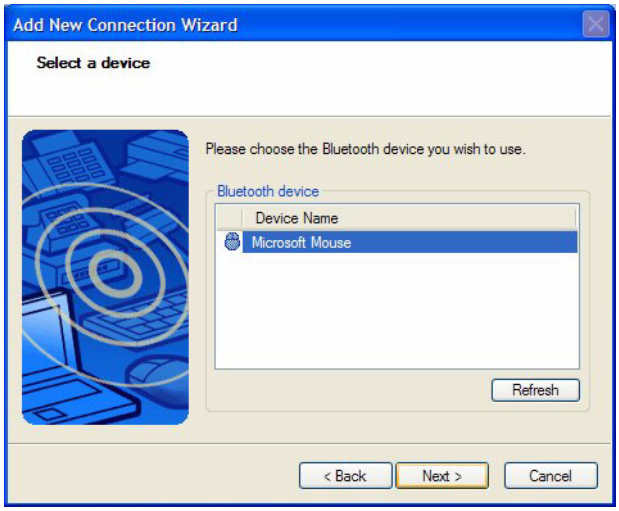
The **Bluetooth Settings window** is shown, quickly followed by the **Add New Connection Wizard**.

4. Place the Bluetooth device (mouse, keyboard, printer, etc.) in discoverable mode.

   NOTE: Each Bluetooth device may have a different way to make it discoverable. Some have a small button on the back of the mouse or keyboard; others may require that you press a key sequence on the keyboard. Look at the documentation that came with the Bluetooth device or visit the manufacturer's website for information.

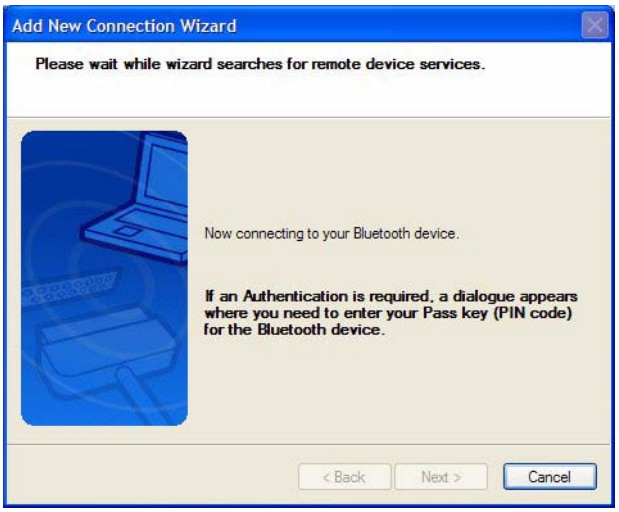
5. After you make the Bluetooth device discoverable, tap **Next**. The "**Searching for Bluetooth devices**" window is shown.

When the Bluetooth device is detected, it is shown in the **Add New Connection Wizard Select a device** window. If multiple devices are detected, each is shown in the window. Select the device to be connected.



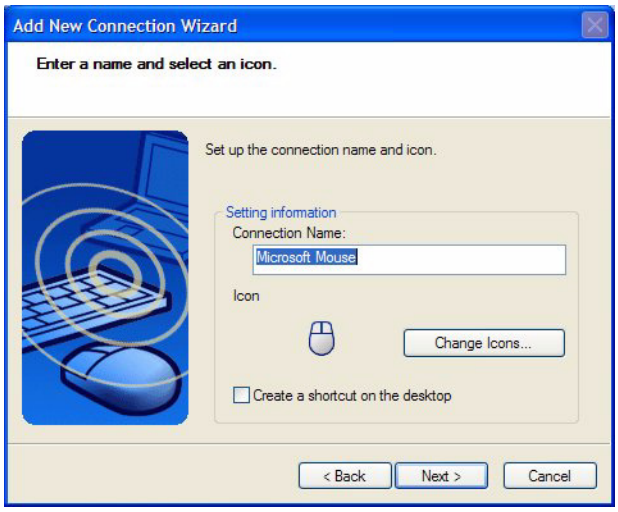
6. Tap **Next** to add the Bluetooth device.The wizard searches for remote device services. The Wizard will display a message that it is connecting and then the passkey number if authentication is required.

   NOTE: If required, immediately enter the number shown in the Passkey field and press **Enter**. Consult your device documentation for more information.



   It may take a short time to complete the connection. Please wait.

7. When the **Completing the Add Bluetooth Device Wizard** window appears, the Bluetooth installation is nearly complete. Tap **Finish** to complete the installation



8. Take your device for a spin. You can now begin using your Bluetooth device.

Important Steps to Take If the Device Is Not Discovered

If the Tablet PC fails to detect the Bluetooth device after what you consider a reasonable number of attempts, try the following:

- Make sure the Bluetooth LED is flashing. If not, open the **Motion Dashboard** and enable the Bluetooth Wireless radio button.
- Make sure the device you are adding is discoverable. There are several things you need to check:
- Install new or fully charged batteries in the Bluetooth device; make sure these are installed correctly
- For keyboards, mice, printers, etc., read the instructions that came with the device or visit the device manufacturer's website for information and other troubleshooting tips. Some devices have a button to press or a series of keys to press to make it discoverable.

- Also with keyboards, mice, printers, etc., be sure that when you go through the Add Bluetooth Device Wizard that you place a checkmark beside “My device is set up and ready to be found.”
- For Tablet PCs transferring files, both Tablet PCs must turn on the device transfer wizard, although only the receiving Tablet PC needs to be discoverable. Tap the Bluetooth icon and then either “Send a file” or “Receive a file.” When you do this, discovery is automatically turned on for the *receiving* device.
- Also for Tablet PCs, you need to enable “Allow Bluetooth devices to connect to this computer” to connect to keyboards, mice, printers, etc. While this is the default, make sure that this setting has not been changed. You find this by right-clicking the Bluetooth icon > **Show Bluetooth Devices > Options**.
- When you open the Bluetooth Devices tab, only the connected devices will be displayed. Other devices are only displayed when you add a device using the Bluetooth Device Wizard.
- Check to see what Bluetooth devices are connected. Tap the **Bluetooth Devices** icon > **Open Bluetooth Settings**. On the Devices window, you should be able to see Bluetooth devices that are currently connected.

If the Bluetooth card in the Tablet PC still fails to detect the Bluetooth device, contact the device manufacturer or visit their website for assistance.

NOTE: A system reboot is not required.

The Bluetooth device is ready to use. If you look at the Bluetooth Settings window, the connected device or devices are shown. An example of a **Bluetooth Settings** window with both a Bluetooth keyboard and a Bluetooth mouse is shown below.

Switch to Other Bluetooth Software. Your Tablet PC comes pre-installed with Bluetooth from Toshiba. Windows XP Tablet PC Edition 2005 supports certain Bluetooth devices natively (e.g., keyboards and mice).

If you would prefer to use the Windows XP Tablet PC software, please visit http:\\selfhelp.motioncomputing.com for instructions on switching to the native Bluetooth software.

Helpful Hints: Bluetooth Wireless

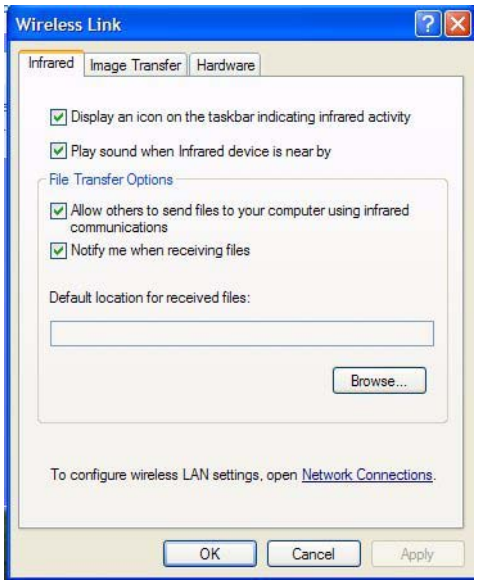
Motion Computing and its Bluetooth partners have worked to ensure a positive experience with this technology, as well as to ensure Bluetooth inter-operability. In doing so, the following operating issues have been found:

- When simultaneously operating Bluetooth wireless and 802.11 wireless, interference between these wireless technologies impacts Bluetooth performance. This is most noticeable when you try to transfer large amounts of data, such as file transfers or printing large documents. This may also be noticeable when you try to transfer large or small amounts of data may if several Bluetooth devices are operating simultaneously in an office.
- Bluetooth audio support is currently based on technology that has not been fully developed for speech recognition. In addition, the Bluetooth software in the Tablet PC does not have a pre-installed Bluetooth headset *profile*. Therefore, for speech recognition, we recommend that you not use a Bluetooth wireless headset. Moreover, the Motion Speak Anywhere technology is designed to record clear audio, dictate notes, and use voice commands without the need for *any* type of microphone headset.
- Should you attempt to install other wireless headset or other audio drivers (such as Bluetooth or USB) over the Tablet PC audio drivers, a malfunction of the Tablet PC audio system may occur because the drivers may not be compatible.
- Because Bluetooth is a relatively new technology, some cross-device compatibility issues may occur. If you are having problems with interpretability of Bluetooth devices, contact the manufacturer of your Bluetooth device and check its compatibility with the Bluetooth software installed on your Tablet PC.
- Do not install Bluetooth software from another manufacturer over the Microsoft Bluetooth software installed on the Tablet PC. This will cause malfunction of the Tablet PC Bluetooth system.

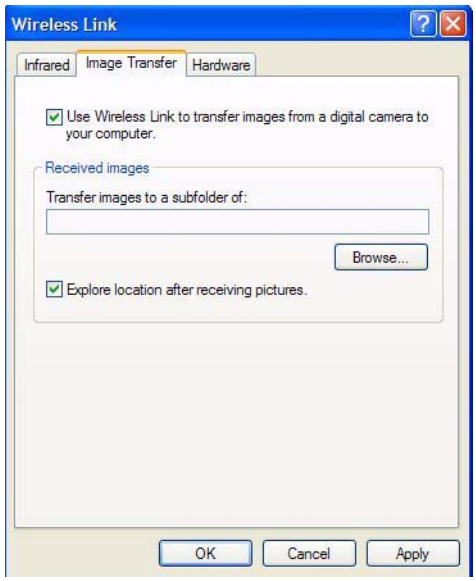
Using Infrared Wireless Connections

The infrared software is installed by default. You can access the Infrared software by going to the Control Panel and tapping the Wireless Link icon.

Double-tap the **Wireless Link** icon to open the **Wireless Link** window. The following shows the Wireless Link window at the Infrared tab. Tap the desired checkboxes.



Accessing Image Transfer. To transfer an image from your camera to your Tablet PC, tap the **Image Transfer** tab in the **Wireless Link** window. The **Image Transfer** window is shown. Specify the destination of the received image(s) and tap **OK** to begin.



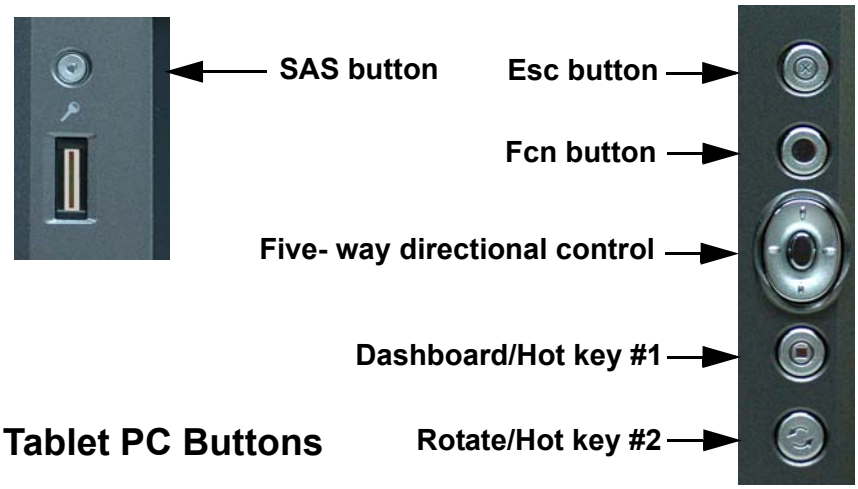
For information about the Infrared Port, tap the **Hardware** tab to open that window.

Configuring Buttons

This section shows you how to program some of the buttons on the front panel of the Tablet PC. It is not necessary for you to customize the buttons, especially at this point in the learning process. Just be aware that it can be done, and as you become more familiar with the Tablet PC, you may want to customize your buttons.

You can configure some of the Tablet PC buttons so they perform the functions that you want them to perform.

- Escape button (Secondary function is programmable)
- Function button (not programmable)
- Five-way directional control buttons (Secondary functions of each key are programmable)
- Hot Keys 1 and 2 (Primary and Secondary functions are programmable)
- SAS (Ctrl+Alt+Del) (not programmable) - this button is located on the front panel in the upper left corner (when in primary landscape orientation) above the key icon and the fingerprint reader.



Tablet PC Buttons

Button Default and Programmable Functions			
Button	**Primary Function**	**Programmable**	**Secondary Function (Press Fcn button + this button)**
Escape	Escape key	Secondary function is programmable	Alt + Tab
Function	Function + other button activates secondary function	Not programmable	No secondary function

Five-way Directional Control Button	Works like the arrow keys on a keyboard. The center of the button works like the Enter key.	Secondary functions are programmable	Left arrow = Shift +Tab Right arrow = Tab Up arrow = Page Up Down arrow = Page Down
Dashboard/Hot Key # 1	Opens **Motion Dashboard**	Both primary and secondary functions are programmable	Open Windows Journal
Rotate/Hot Key # 2	Rotates the display	Both primary and secondary functions are programmable	Open Tablet PC Input Panel
SAS (This button is located at the top left corner with a key icon)	Ctrl + Alt + Del (Windows Task Manager). Also used for domain authentication or logon screen.	Not programmable	No secondary function

To change the default button properties:

1. Open **Motion Dashboard** and tap **Pen and Button** Options. Or, double-tap the **Tablet and Pen Settings** icon in the system tray, located in the lower right corner of the display window.
2. Tap **Tablet Buttons**.
3. Highlight the name of the tablet button you want to reprogram. The button being programmed turns red.
4. Tap **Change**.
5. On the **Change Button Functions** window, tap the down-arrow beside Action. This opens the list of actions.
6. Select a new action from the list.

   NOTE: For some actions, you only need to select the action itself to change the button property. For others, such as to launch a program, you must browse and find the program; or, to set up a key combination, you must press a sequence of keys. You can also tap **Reset** to return to the button defaults.

7. Tap **OK**. In the list of Actions, you should see the new action for the button you programmed.

Chapter 3
Care and Maintenance

This chapter describes various care and maintenance procedures that you should do on a routine basis with your Motion Tablet PC.

Caring for Your Tablet PC and Its Accessories

The Tablet PC display and chassis are designed to be very durable. This section describes the proper care and maintenance that will keep them working and in good condition for a long time. For general information about care of the Tablet PC and its components and accessories, see the *Regulatory and Safety Guide* packaged with your Tablet PC.

CAUTION: Be sure to follow the guidelines listed below when caring for your Tablet PC and its components. Improper use may damage the Tablet PC and/or its components and void the warranty.

General Care

- Protect the Tablet PC from exposure to extreme temperatures, shock, liquids, and strong magnetic fields.
- Do not open or disassemble the Tablet PC other than to replace memory modules or to replace the battery. Always follow the instructions included with these accessories when performing these procedures.

WARNING: To avoid the risk of personal injury or damage to the Tablet PC, when replacing memory modules, turn off your Tablet PC, unplug the AC power connection, and remove the battery. Ground yourself by touching a grounded conductive surface, such as a device or appliance with a grounded, three-pronged plug. Avoid touching the pins and leads on the memory and the internal circuitry of the Tablet PC.

- When storing the Tablet PC for an extended period of time, unplug AC power and remove the battery after discharging it part way.
- Do not place heavy objects on top of the Tablet PC.

Caring for the Standard and View Anywhere Displays

- General cleaning of either display — Clean fingerprints and most marks from the display surface by wiping it with the soft cloth (provided). Never spray or pour liquids directly onto the display surface itself. Never use an abrasive cleaner on the display. If liquid is spilled on the display, wipe it up immediately.
  - Cleaning the standard display — If needed, spray a soft cloth (not directly on the display) with a window-type cleaner and wipe the display.
  - Cleaning the View Anywhere Display — If needed, clean with any alcohol-based product recommended for use on anti-reflective glass. Other cleaning products may leave a residue.
- Avoid using tissues or paper towels to clean the display surface. These contain wood fibers that can scratch the display.
- Use only the Motion Digitizer Pen on the display. Do not write on the surface with an ink pen or pencil, any pointed or other object that could damage the display surface.
- Do not place heavy objects on the display surface.
- Protect the display surface from unnecessary contact by using the Hard-top Cover or a portfolio when transporting the Tablet PC.
- Avoid exposing the display to direct sunlight for long periods of time.

Caring for the Motion Digitizer Pen

- Always store the Motion Digitizer Pen in the Tablet PC pen bay or in the portfolio when not in use.
- Do not store the pen vertically on the tip. Constant tip pressure can affect the pen-to-digitizer interaction.
- Change the pen tip regularly. See the **CAUTION** and refer to “Replacing the Pen Tips” on page 70.
- The pen contains sensitive electronics. Do not immerse it in liquids.

CAUTION: Certain environments may contain particles or debris that can adhere to the Tablet PC display or to the pen tip. To avoid damaging the display, clean it frequently with the cleaning cloth, provided with your system. Also, change pen tips regularly, especially if you drop the pen onto a rough surface that could damage the tip or embed debris in it. Damaged pen tips can scratch the display. Consider using a Motion Slip Case to protect the display and the pen.

Replacing the Pen Tips. Normal use eventually wears down the pen tip, so the pen ships with extra tips and a small “tip tool” for replacing them.

1. Grasp the old tip with the silver ring of the tip replacement tool. Use the notch on the ring to grab the tip.
2. Pull the old tip out of the pen.

3. Insert a new tip.
4. Apply slight pressure to push it into place.

Ordering New Pens

To order additional pens, visit the Motion Computing website at www.motioncomputing.com/accessories.

Traveling With Your Tablet PC

Here are some tips for traveling with your Tablet PC:

- Remove all accessories and cables. Remember to pack those you will need while traveling and do not forget to pack at least one Motion digitizer pen.
- Attach the Hardtop Cover or slip the Tablet PC into a portfolio to protect the display.
- Protect the pen by keeping it in the Tablet PC pen bay or portfolio case during travel.
- Pack the Tablet PC securely in a briefcase or hand-carried luggage, and keep it separate from toiletries, liquids, and food. Do not pack it in checked luggage when you travel.
- Keep the Tablet PC stable during travel; secure it to prevent it from sliding around in overhead bins and car trunks.

NOTE: For travel warnings, see the section “FAA Wireless Air Travel Requirements” in this chapter.

Traveling by Air

- Prepare for airport security by charging the battery in the event Security asks you to start the Tablet PC.
- Have it hand-inspected or sent through the X-ray scanner, but never carry it through the metal detector.
- Either turn off or place the Tablet PC in hibernation mode for takeoff and landing.

FAA Wireless Air Travel Requirement

WARNING: The FAA requires that you suspend wireless operations, such as 802.11 and Bluetooth, before boarding the plane. The easiest way to disable *internal* wireless operations is by pressing the Wireless on/off button for 1/2 second. You can also uncheck (disable) all wireless devices in the **Motion Dashboard**. The wireless LED on the Tablet PC front panel, shown here, is off when wireless communications are disabled. To disable *external* wireless operations, remove any installed wireless PC Cards.

WARNING: Do not transport the Lithium-ion batteries used in your Tablet PC in checked baggage. You may take up to two spare batteries in carry-on luggage in addition to the one in your Tablet PC. Transporting batteries in checked baggage or transporting more than two spare batteries is a violation of transportation regulations.

Other Travel Hints

- Before extended use in the field or long trips away from AC power, adjust the Power properties to maximize battery conservation. Right-click the **Power Meter** icon in the system tray to open the **Power Options** Properties dialog box. Then adjust the options. For more information, refer to "Helpful Hints: Battery and Power Management " on page 36.
- For international travel, obtain and use the appropriate adapters for your destination's electrical outlets. A current converter is not necessary.
- You may want to carry proof of ownership or a merchandise passport when traveling internationally.
- Consult your insurance company and credit card company to learn about emergency travel assistance in the event your Tablet PC becomes lost or disabled.

System Repair/ Recovery Procedure

You may never need to perform this procedure, but in the event that your system shows signs of instability or corruption, it may become necessary. In most cases, once initiated, this procedure lets you repair the Tablet PC hard disk drive and retain the original system data, applications, passwords, and settings with no data loss.

In those cases where no repair is possible, this procedure overwrites your system data. You can cancel the procedure before the recovery process begins. In this case, you may want to contact your system administrator for assistance.

1. If possible, back up your data files.
2. Turn off your Tablet PC.
3. Insert the Motion Tablet PC Operating System Recovery CD (Windows XP Professional Service Pack 2) into the CD-ROM drive and start the Tablet PC.
4. When prompted, press any key to boot from the CD.
5. On the Set Up screen, select ENTER to set up Windows XP.

   NOTE: Do not select R=Repair before you accept the End User License Agreement (EULA). If you do, you must exit this procedure, shut down and restart your Tablet PC, then accept the EULA before proceeding.

6. Press F8 to accept the terms of the End User License Agreement.
7. When the next options appear, select from the following:

   IMPORTANT: If Windows XP cannot repair your system, this procedure automatically skips to the second option, ESC = Don't Repair (reformatting):

- R = Repair option — Installs Windows XP Tablet PC Edition 2005 on your system, preserving your system data, applications, passwords, and settings
- ESC = Don't Repair (reformatting) option — Reformats your hard disk drive. If Windows XP automatically skips to this option (that is, no repair is possible), you must decide whether to reformat now or

cancel the procedure. If you decide to reformat, select either Format the partition using the NTFS File System or the NTFS File System (Quick). If you decide not to reformat, select ESC to cancel the procedure.

8. Continue following the on screen instructions.
9. After your operating system has been reinstalled, you will be prompted to insert the Motion Drivers and Utilities Recovery CD.
    - For a repaired system, this process completes quickly. If your system notifies you to reboot, restart your system.
    - For a reformatted system, this process takes some time while the drivers and utilities are reinstalled. Once Windows loads, your settings and drivers begin to install. Your system may reboot several times during this process. No action is required. At this point, you may need to install additional software (such as Microsoft Office), as appropriate, from the Motion Application CD. You may also want to restore your personal preferences and settings.

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Appendix A

Troubleshooting and Support

All Motion Computing Tablet PCs have passed a rigorous series of performance and quality-control tests, but now and then a problem may occur. If you do not see a solution among the following system and software issues, check the section “Support Options” in this chapter or go to our website at www.motioncomputing.com/support.

Solutions To Common Problems

PROBLEM	CAUSE	SOLUTION
Power		
The Tablet PC won’t start when I slide the Power switch.	The Power switch hasn’t been fully engaged.	Slide and hold the power switch for at least a half-second, but no more than three seconds.
	Fully discharged battery or no battery and no AC power.	Connect the AC adapter to operate the Tablet PC and charge the battery.
The Tablet PC won’t shut down.	An application has locked up the Tablet PC.	Press the SAS button (small button with a key icon nearby) to start Windows Task Manager and close the application, or Slide and hold the power switch for at least 5 seconds to force a shutdown of the Tablet PC.
The Tablet PC won’t enter Hibernation mode.	Hibernation isn’t enabled.	Enable Hibernation through Power Option Properties.

The Tablet PC won't come out of Hibernation mode when running on battery power.	Fully discharged battery and no AC power.	Connect the AC adapter to provide power to the Tablet PC and charge the battery.
The display goes black while the Tablet PC is still turned on.	The Tablet PC system has gone into stand by after sitting idle for a period of time. (In this state, the power LED flashes blue.)	Slide the power switch for about a second to resume operations.
	System has gone into low-battery Hibernation mode. (In this state, the power LED is off.)	1. Slide the power switch for about a second to resume operations. 2. Connect the AC adapter to the Tablet PC to charge the battery.
BATTERY		
Data loss during battery swap.	The unit is designed to maintain the data and settings for up to 30 seconds in stand by while you swap the battery. This time may vary due to your system and the programs you're running.	When you swap the battery with the unit in stand by, be sure to save your data before removing the battery to avoid data loss.
The battery seems to run down very quickly (lasting less than three hours after a full charge).	Accessory devices such as a DVD player and applications that make heavy use of the hard drive drain the battery more quickly.	Use AC power when possible and/or turn off the accessory devices.
	The battery is weakening or defective.	All batteries weaken over time, but if a new battery is needed, visit the Motion website to order a new battery.
DISPLAY		
The desktop is too big for the display – I can't see all of the desktop icons.	Screen resolution is set higher than the default 1024 x 768 with 32-bit resolution.	Decrease the screen resolution by opening the Motion Dashboard, selecting Graphics Properties, then the Schemes tab.

When I disconnected a second monitor from the Tablet PC, the image became too big for the Tablet PC display.	The Tablet PC has attempted to spread the image of a window or desktop beyond the screen area of the active monitor.	1. Tap the Properties button on the Motion Dashboard. 2. Tap Graphics Options, then Graphics Properties... to open the Properties screen. 3. Select Notebook to make the Tablet PC the primary display.
The display looks dim.	Brightness is set too low.	Adjust brightness from the Motion Dashboard.
The screen is unreadable or distorted.	Screen resolution and/or color quality are set incorrectly.	Reset resolution to 1024 x 768 and color quality to 32-bit by opening the Motion Dashboard, Graphics Properties, then the Schemes tab.
	Display driver has become corrupted or uninstalled.	1. Open the Windows Control Panel, select Performance and Maintenance (Category View). or System (Classic View). 2. Select the Hardware tab. 3. Select Device Manager. 4. Open Display adapters. 5. Double-tap on an adapter. 6. Select the Driver tab. 7. Choose Update Driver... and follow the Installation Wizard.
PEN		
The Tablet PC digitizer screen doesn't respond to the plastic stylus I use on my PDA.	You're using the wrong input device.	Only the Motion Digitizer Pen lets you write on the Tablet PC display. The Tablet PC doesn't respond to other tablet pens or to a plastic stylus.
The Motion Digitizer Pen tip doesn't line up with the arrow-cursor when I tap on the screen.	The pen and display need recalibrating.	Open the Motion Dashboard and select Calibrate.

When I write, I unintentionally click the pen function button while I'm writing with the pen.	You're pressing the pen button with your thumb or finger when you write or gripping the pen too tightly and accidentally pressing the pen button. This enables the right-click function of the pen.	Try these hints: • Readjust how you hold the pen. Place your fingers on either side of the pen function button when you write. • Practice using the pen function button with both your index finger and thumb to see which you prefer. • Relax your grip. Only a light touch is needed to write with the pen. • Deactivate the pen right-click function through Tablet and Pen Settings. Instead, press and hold the pen to the display surface to right-click.
The pen button doesn't work. I can't get it to right-click.	The right-click option for the pen button may be deactivated.	Re-activate the right-click option: Double-click the Tablet and Pen Settings icon, select Pen Options, and reselect Use pen button to right-click. Select Apply>OK.
	You may not be correctly timing clicking the pen button and tapping the pen on the display.	To right-click, hold the pen button down and then firmly tap on the display.
The buttons on the Tablet PC don't do what I expect them to do.	Button functions have been changed.	Double-tap the Tablet and Pen Settings icon, then Tablet Buttons. You can reset the buttons to the defaults. NOTE: Button functions are associated with the orientation in which they're programmed.
INTERFACE/PORTS		
The system doesn't recognize the PC card I've inserted.	The card is incorrectly inserted.	Eject the card and re-insert it with the label side up.
	The device is not supported.	Check Windows XP compatibility.

The system doesn't recognize a USB device.	Windows XP may take a short time to recognize the device.	Wait until Windows XP recognizes the device.
	The accessory isn't connected to the Tablet PC correctly.	Check the connection cable and be sure it is inserted into the correct port on the Tablet PC and the accessory device.
	The correct driver isn't built into Windows XP.	Use the device's installation CD or check the manufacturer's website for the correct driver.
The Tablet PC is sitting in the Motion FlexDock for the LE Series, but the system doesn't recognize any accessory devices, such as the external monitor or DVD/CD RW.	The Tablet PC isn't fully seated in the Motion FlexDock for the LE Series.	Reseat the Tablet PC in the Motion FlexDock for the LE Series.
AUDIO		
No sound is coming from the built-in speakers.	Connecting a headset or external speakers mutes the built-in speakers.	Disconnect the headset or external speakers if not in use.
No sound is coming from any speakers.	Audio volume is too low or has been muted.	Open the Motion Dashboard and adjust the speaker volume by sliding the volume slider or uncheck the Mute button.
I've forgotten my BIOS password and can't access my system.	The Tablet PC will let you enter several passwords incorrectly before it temporarily locks the system.	Turn the Tablet PC off and back on and try re-entering your password (you can do this as many times as needed). If you have forgotten your password, contact Motion Computing Technical Support for information about unlocking your system at www.motioncomputing.com/support.
The program I'm working in has stopped responding, but the cursor moves and other programs work.	The program has crashed.	Press the Security button (small button with a key icon) on the Tablet PC front panel to open the Task Manager and end the non-responsive program.

The system seems to be operating more slowly than usual.	The hard disk drive is full or nearly full.	Run the Disk Cleanup utility to clear out unnecessary and temporary files. Remove unneeded programs and files.
	The disk needs defragmenting.	Run Disk Defragmenter to consolidate files and folders on the hard drive. Consult the “Performance and Maintenance” section of the Microsoft Help and Support Center.
COMMUNICATIONS		
The wireless communication keeps connecting even when I don’t want it to.	The default setting is On.	Uncheck the wireless checkboxes in the Motion Dashboard.
Data doesn’t transfer through the wired Ethernet cable.	The Ethernet cable is not connected correctly.	Reconnect and check the activity LEDs next to the LAN (RJ-45) port. They should flash green and amber.

Frequently Asked Questions

Can I make the battery charge last longer?

- Change to the Max Battery power scheme (right-click on the Power/Battery icon in the system tray—located in the lower-right corner of the display window—and tap Adjust Power Properties; under Power schemes, tap Max Battery). The Tablet PC comes with Motion Computing Optimized as the default power scheme.
- Turn on the Ambient Light Sensor on the Motion Dashboard. This will dim the display automatically (when possible) and save battery power.
- Dim the display brightness by opening the Motion Dashboard and moving the Display Brightness slider. (You can also double-tap on the Tablet and Pen Settings icon in the system tray and choose the Display tab to get this brightness slider.)
- Disconnect LAN/modem connections and disable wireless communications when not in use (uncheck the Wireless checkboxes in the Motion Dashboard).
- Turn off optional and unnecessary background programs and turn off or unplug accessory equipment from the USB ports.

What does the Tablet PC need for use in another country?

Just an outlet adapter, which you can find in airports and travel stores. The AC adapter will adjust automatically to different voltages when plugged into the correct location-appropriate power adapter.

What's the best way to clean the standard display screen?

To clean the acrylic display screen, wipe it with a soft cloth (like the one supplied) onto which you have sprayed a window-type cleaner. Do not spray cleaners, spray/pour any liquid, nor wipe any abrasive cleaner on the screen nor any surface of the Tablet PC. Do not use tissues or paper towels to clean the screen. They contain wood fibers and may scratch the surface.

How should I clean the View Anywhere display screen?

To clean the View Anywhere display screen, wipe it with a soft cloth (like the one supplied). If needed, clean with any alcohol-based product recommended for use on anti-reflective glass. Other cleaning products may leave a residue. Do not spray cleaners, spray/pour any liquid, nor wipe any abrasive cleaner on the screen nor any surface of the Tablet PC. Do not use tissues or paper towels to clean the screen. They contain wood fibers and may scratch the surface.

Will scratches affect the display/digitizer's performance?

Testing has not found appreciable loss of performance on a scratched display.

How sensitive is the screen to various elements?

As with any computer or electronic device, the Tablet PC should be protected from liquids, dirt and sand, other contaminants, and extreme heat.

Will the Tablet PC work with any monitor or USB accessory, keyboard, mouse, disk drive, etc?

As long as the device's driver is available either in the Windows XP operating system or from the manufacturer and it carries the Windows XP logo or certification, it should work with your Tablet PC. For more information, see www.microsoft.com/help.

Why doesn't the Tablet PC or FlexDock have parallel, serial, or PS2 (mouse) ports?

Microsoft Tablet PC certification requires the system to be completely Grab-and-Go—that is, to be able to dock with and undock from all accessories without putting the system into suspend or shutting it down. Connection through legacy ports (serial, parallel, PS2) often requires suspending or restarting the system, which prevents you from moving between desktop mode and mobile mode seamlessly in one docking/undocking step.

How do I adjust the Tablet PC for left-handed use?

Double-tap on the **Tablet and Pen Settings** icon in the system tray, located in the lower-right corner of the display window, which opens the Settings window. You can change it for left- or right-handed use as well as change the location of the menus. Then, make sure you recalibrate the pen.

Motion Warranties

Standard and Extended Warranty and Insurance Programs

Motion Computing currently provides limited warranties on Motion products and accessories. See the Warranty packaged with your Motion product or accessory or visit our website at www.motioncomputing.com.

In addition, Motion Computing offers extended warranties along with various screen and configuration insurance programs. Visit our website at www.motioncomputing.com/support.

Motion Computing Support

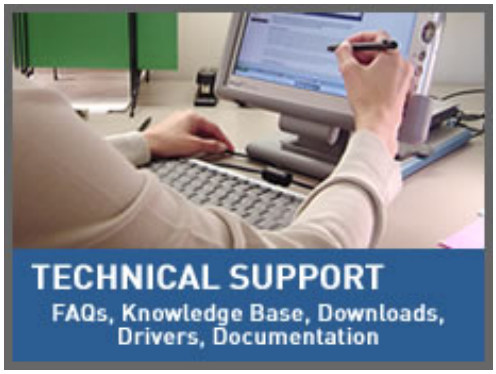
If you need assistance or answers to frequently asked questions about your Motion Tablet PC, visit www.motioncomputing.com/support. We also offer a Knowledge Base of additional information that may help with your problem.

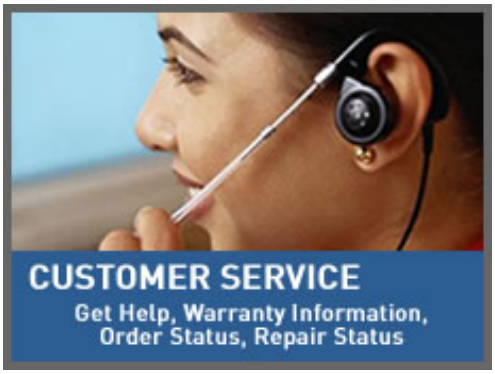
Appendix B
Motion Tablet PC Specifications

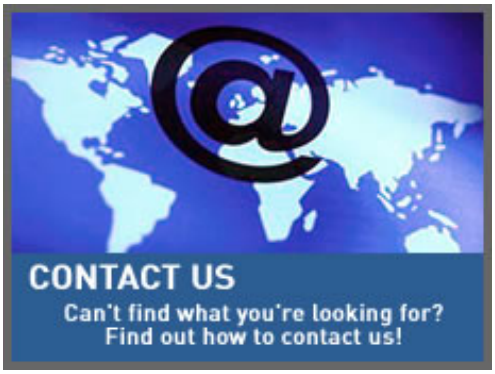
Refer to the Motion Computing website at www.motioncomputing.com for the latest information and specifications for your Tablet PC.

Motion recommends Microsoft® Windows® XP Tablet PC Edition 2005.

MOTION SUPPORT







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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This device complies with FCC RF Exposure limits set forth for an uncontrolled environment, under 47 CFR 2.1093 paragraph (d)(2).

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

MAXIMUM AVERAGE SAR (1g) (FOR 802.11b) is 0.322W/kg.
MAXIMUM AVERAGE SAR (1g) (FOR 802.11g) is 0.221W/kg.
MAXIMUM AVERAGE SAR (1g) (FOR 802.11a) is 0.370W/kg.